

**UNITED STATES DISTRICT COURT FOR THE  
DISTRICT OF MASSACHUSETTS**

ANNE MACKENZIE,

Plaintiff,

vs.

PFIZER, INC., PHARMACIA  
CORPORATION, PARKE, DAVIS & CO.,  
WARNER LAMBERT COMPANY, AND  
WARNER LAMBERT COMPANY, LLC

Defendants.

Civil Action No. \_\_\_\_\_

JURY TRIAL REQUESTED

**PLAINTIFF'S ORIGINAL COMPLAINT**

Plaintiff Anne MacKenzie (“Anne” or “Plaintiff”) files her Original Complaint against Defendants Pfizer, Inc. (“Pfizer”), Pharmacia Corporation (“Pharmacia”), Parke, Davis & Co. (“Parke Davis”), Warner Lambert Company (“Warner Lambert”), and Warner Lambert Company, LLC (“Warner LLC” and collectively, “Defendants”).

**I. NATURE OF THE ACTION**

This is a product liability action to recover damages for catastrophic and irreparable injuries. Following her ingestion of Defendants’ blockbuster anti-epileptic drug, Dilantin, Anne suffered a severe and permanent cerebellar atrophy reaction that rendered her permanently dependent on caregivers for the remainder of her life. Plaintiff’s cerebellar atrophy reaction was the direct and proximate result of Defendants’ wrongful conduct in connection with the design, manufacture, labeling, sale, testing, marketing, advertising, promotion, and/or distribution of Dilantin.

**II. PARTIES**

1. Plaintiff is a citizen and resident of Wakefield, Massachusetts.
2. Defendant Pfizer is a Delaware corporation with its principal place of business at 235 East 42<sup>nd</sup> Street, New York, New York 10017.
3. Defendant Pharmacia is a Delaware corporation with its principal place of business located at 100 Route 206 North Peapack, New Jersey 07977.
4. Defendant Parke Davis has its principal place of business at 235 East 42<sup>nd</sup> Street, New York, New York 10017.
5. Defendant Warner Lambert is a Delaware corporation with its principal place of business at 235 East 42<sup>nd</sup> Street, New York, New York 10017.
6. Defendant Warner LLC is Delaware limited liability company with its principal place of business at 235 East 42<sup>nd</sup> Street, New York, New York 10017.

**III. JURISDICTION AND VENUE**

7. This Court has subject matter jurisdiction over this lawsuit pursuant to 28 U.S.C. §1332 because there is diversity of citizenship between the parties and the amount in controversy exceeds \$75,000, exclusive of interest and costs. The Court has jurisdiction over Defendants because they engaged in business in this judicial district in connection with the transactions and occurrences giving rise to this action, and because the wrongful conduct challenged herein was directed at, took place in, and/or had foreseeable injurious effects in this judicial district and the State of Massachusetts. The Court also has exercise jurisdiction over Defendants because they have sufficient minimum contacts in Massachusetts and intentionally avail themselves of the markets within Massachusetts through the promotion, sale, marketing, and distribution of their products in Massachusetts, thus rendering the exercise of jurisdiction by this Court proper and

necessary. Each Defendant is licensed to conduct and/or is systematically and continuously conducting business in the State of Massachusetts, including, but not limited to, marketing, advertising, selling, and distributing drugs including Dilantin to residents of Massachusetts. Defendants have continuously and systematically engaged in business in this judicial district and the State of Massachusetts such that they have subjected themselves to personal jurisdiction in this Court for all purposes.

8. Venue is proper in this judicial district pursuant to (i) 28 U.S.C. §1391(b)(2), because a substantial part of the events or omissions giving rise to the claim occurred in this judicial district; and (ii) because Defendants regularly and systematically conduct business in this judicial district including, without limitation, the transactions at issue in this action. Venue is also proper in this judicial district pursuant to 28 U.S.C. §1391(a)(2) because Plaintiff's claims arose from events taking place within this judicial district and Plaintiff resides in this district

#### **IV. FACTUAL BACKGROUND**

##### **A. Overview of the Case**

9. Dilantin (phenytoin) is an anti-seizure medication that has been designed, developed, manufactured, advertised, and distributed by Defendants and/or their predecessors since 1939. Since that time, the global epilepsy market has emerged as a multi-billion-dollar enterprise for pharmaceutical companies. In the last few years alone, Defendants have reaped hundreds of millions of dollars in sales from their blockbuster drug. Across the decades following product launch, Defendants have sold billions of dollars of Dilantin throughout the world.<sup>1</sup>

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<sup>1</sup> From 1939 through 1976, Defendants retained 95% of the market share of epilepsy drugs sold in the U.S. From 1976 through 1999, Dilantin Kapsules was the only drug approved by the FDA as extended release phenytoin sodium capsules.

10. Cerebellar atrophy is an undeniably severe and permanent side effect of Dilantin. It is the process in which neurons in the cerebellum – the area of the brain that controls coordination, balance, speech, cognition and emotions – deteriorate and die leading to shrinking of the cerebellum and, subsequently, to irreversible and catastrophic balance, speech, memory deficits and potential death. Despite substantial scientific literature, Defendants' own internal adverse event reports, and glaring safety signals clearly identifying Dilantin as a primary cause of cerebellar atrophy, Defendants chose not to include any reference to cerebellar atrophy in its U.S. Dilantin label until December 2015. Defendants did not change their Dilantin label on their own initiative or as a result of their own (deficient) internal product safety surveillance protocols. Instead, Defendants only added the reference in the label to cerebellar atrophy after Plaintiff's counsel in this case brought claims against Defendants on behalf of numerous other individuals who were similarly catastrophically injured.

11. Defendants are required to conduct adequate post approval safety surveillance for all of their drugs, including Dilantin, by collecting and evaluating aggregated safety data and scientific literature relating to the adverse effects of those drug products. Defendants are required by law to analyze and determine whether safety signals exist; to report those safety findings to the FDA; to continuously revise or update their product labels; and to provide an identification of the current risks associated with Dilantin in order to allow for the safe and effective use of the product, including warning for the risk of cerebellar atrophy and its related conditions. Defendants did none of these things. Instead, by way of limited example, discovery in related cases has revealed the following:

- Defendants have known that Dilantin causes cerebellar atrophy for decades, but did not change their U.S. label until December 2015 and only did so after Plaintiffs' counsel in this case brought legal claims against Defendants on behalf of other individuals with Dilantin-induced cerebellar atrophy;

- Defendants changed their Dilantin product labels in foreign countries (including Switzerland, Sweden, Germany, Australia, New Zealand and others) to warn of cerebellar atrophy decades before changing the U.S. Dilantin label;
- In foreign countries, Defendants directly warn patients and consumers of the risk of cerebellar atrophy from Dilantin, but do not do so in the United States – even today;
- Although Defendants have been involved in Dilantin cerebellar atrophy litigation in the past, Defendants failed to disclose those cases to the FDA or warn U.S. physicians of the risk of cerebellar atrophy from Dilantin despite Defendants' actual knowledge of the risk of harm;
- For nearly 70 years, Defendants ignored and failed to report scientific literature to the FDA that revealed the causal link between Dilantin and cerebellar atrophy;
- In at least 2001, 2003, 2008 and 2013, Pfizer studied but did not report to the FDA the risk of cerebellar atrophy from Dilantin;
- Defendants have never performed adequate safety signal detection or other pharmacovigilance activities for Dilantin and cerebellar atrophy;
- Defendants have not followed their own internal Standard Operating Procedures, which require Defendants to study the Dilantin safety literature every month and conduct safety signal analysis on Dilantin for cerebellar atrophy on a bi-annual basis;
- Defendants ignored substantial safety signals for Dilantin and cerebellar atrophy at multiple points in Dilantin's marketing history, including in 2008 when Defendants performed a safety signal analysis for cerebellar atrophy and disregarded the results even though Defendants' safety signal report reflected a clear signal and substantial safety concerns relating to cerebellar atrophy;
- The safety concerns with Dilantin were so significant that they escalated to the very top of the company – specifically, in 2008 and other years Pfizer's at-the-time Chief Executive Officer (Jeffrey Kindler) requested and was receiving safety briefing on Dilantin. Despite management awareness at the highest level, Defendants failed to take appropriate steps to address the risk-benefit profile of Dilantin or warn U.S. prescribing physicians or consumers of the serious risks associated with the drug;
- Pfizer triaged Dilantin (and its other off-patent and therefore less profitable drugs) into a Pfizer-created safety system that relegates off-patent products to *de minimis* safety oversight in order to reduce the costs associated with and personnel assigned to safety oversight of those off-patent products. The end

result of this cost-savings exercise is substantial risk to public health because safety signals are missed and never evaluated as the Pfizer Safety Risk Leads responsible for off-patent drugs lack the resources to adequately manage the volume of drugs that are assigned to them. Pfizer has the financial resources to adequately monitor safety for all of its products, including its less profitable off-patent products like Dilantin. While the cost-savings system implemented by Pfizer may result in higher profits, it is not reasonable pharmacovigilance for the largest drug company in the world;

- Despite frequent overturn of Safety Risk Leads, Pfizer has never implemented a safety system that educates successor Safety Risk Leads for a drug product (including Dilantin) on the historical safety concerns with that product. In fact, Pfizer does not even know who was responsible for Dilantin safety when Parke Davis owned the drug, at the time Pfizer bought Parke Davis/Warner Lambert and Dilantin in 2000, or the identities of the Safety Risk Leads responsible for Dilantin for years after that purchase;
- Shortly after Plaintiffs' counsel in this case brought claims against Defendants for Dilantin-induced cerebellar atrophy, Defendants' marketing team was instructed to stop detailing (the process by which Defendants' sales representatives provide information directly to doctors on the risk-benefit profile of a drug) prescribing physicians on Dilantin, but were advised to leave Dilantin Savings Cards with prescribers in a calculated effort to yield more sales of the drug without disclosing its risks;
- When Defendants changed their Dilantin labels in foreign countries to warn of the risk of cerebellar atrophy from Dilantin, Defendants disclosed different and additional safety information to those foreign regulatory authorities than Defendants provided to the FDA when Defendants changed their U.S. Dilantin label to reference cerebellar atrophy in December 2015;
- Although Defendants have been cited by the FDA for failing to report serious adverse events, Defendants vastly underreported and knowingly soft coded Dilantin cerebellar atrophy adverse events as less severe adverse reactions. Defendants also directly misrepresented the total number of Dilantin cerebellar atrophy adverse events to the FDA when Defendants submitted their Dilantin cerebellar atrophy Clinical Overview to the FDA in October 2015; and
- Even though Dilantin and Defendants were subject to a Consent Decree and Corporate Integrity Agreement with the United States Department of Justice and the FDA, Defendants failed to comply with their federal law requirement to report cases of cerebellar atrophy to the FDA for decades.

12. Defendants' failure to study and report the scientific literature is also significant.

The scientific literature and reports of Dilantin-induced cerebellar atrophy date back more than

70 years. The scientific studies and peer reviewed literature positively identifying a direct causal link and/or association between Dilantin and cerebellar atrophy number well over 100 readily available papers, all which Defendants knew or, at a minimum, should have known about, and should have but did not disclose to the FDA and U.S. healthcare providers.

13. Further, despite hundreds of reports of cerebellar atrophy, gait disturbances, ataxia and neurological adverse events associated with Dilantin/phenytoin products, no safety information has been included in the Dilantin labeling to reflect the increased risks to subpopulations, the unique risk factors, the duration of therapy, or pharmacogenetics on the safety of the post-marketing experience with these catastrophic and disabling injuries.

14. Indeed, despite the significant volume of safety information establishing the known risks of an adverse reaction as severe and permanent as cerebellar atrophy, Defendants' United States Dilantin label remained entirely silent about these risks for decades. To this day, Defendants still fail to provide sufficient information regarding the risks of cerebellar atrophy to United States physicians and consumers of Dilantin.

**B. The Plaintiff**

15. Ms. MacKenzie is a 65-year-old nurse who resides in Wakefield, Massachusetts. Ms. MacKenzie took Dilantin for 20 years. She was diagnosed with cerebellar atrophy from Dilantin in September of 2016. She currently has severe ataxia, memory loss and some dysarthria as a result of her Dilantin-induced cerebellar atrophy.

**C. Mechanism of Injury**

16. Cerebellar atrophy is a devastating disease that impacts motor function, coordination, memory and ability to speak. It is a process in which neurons (nerve cells) in the cerebellum - the area of the brain that controls coordination and balance - deteriorate and die.

The most characteristic symptom of cerebellar atrophy is a wide-based, unsteady, lurching walk, often accompanied by a back and forth tremor in the trunk of the body. Other symptoms include difficulty speaking and swallowing; slow, unsteady and jerky movement of the arms or legs; slowed and slurred speech, and nystagmus. There is no cure for Dilantin-induced cerebellar atrophy.

17. Dilantin (phenytoin) causes cerebellar atrophy. In particular, Dilantin causes pathologic alterations, loss of Purkinje cells, Bergmann gliosis, and granule cell damage with shrinkage of cerebellar white matter through the secondary degeneration of axons. Dilantin decreases glutamic acid and increases gammaaminobutyric acid (GABA) concentration in the brain. GABA is a major neurotransmitter in the cerebellum and is the pathway through which Dilantin controls the spread of seizures.

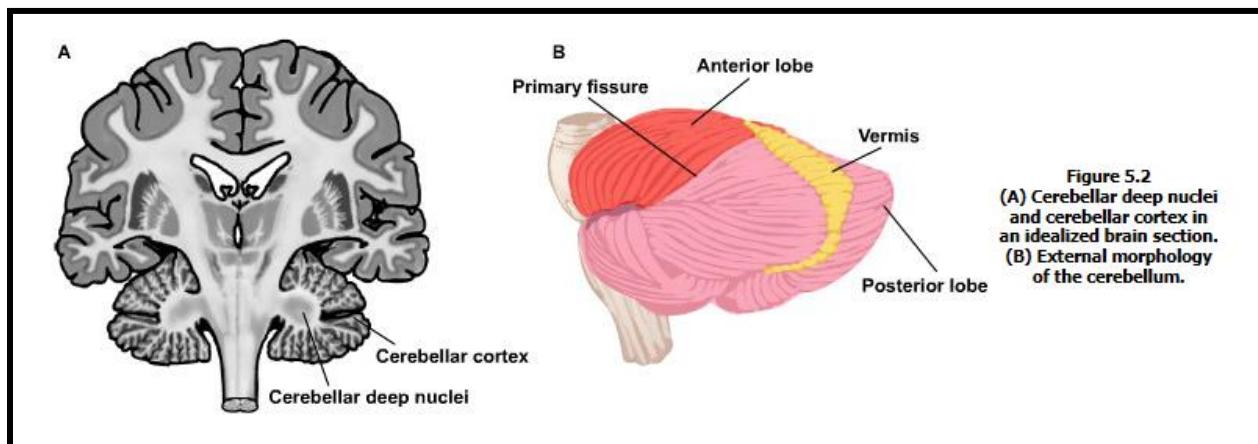
18. Repeated doses of Dilantin at pathologic levels can overstimulate Purkinje cells, resulting in their death. Dilantin-related damage of Purkinje cell axons is initiated by an intrinsic ability of these neurons to induce microsomal enzymes with proliferation of the smooth endoplasmic reticulum (SER).

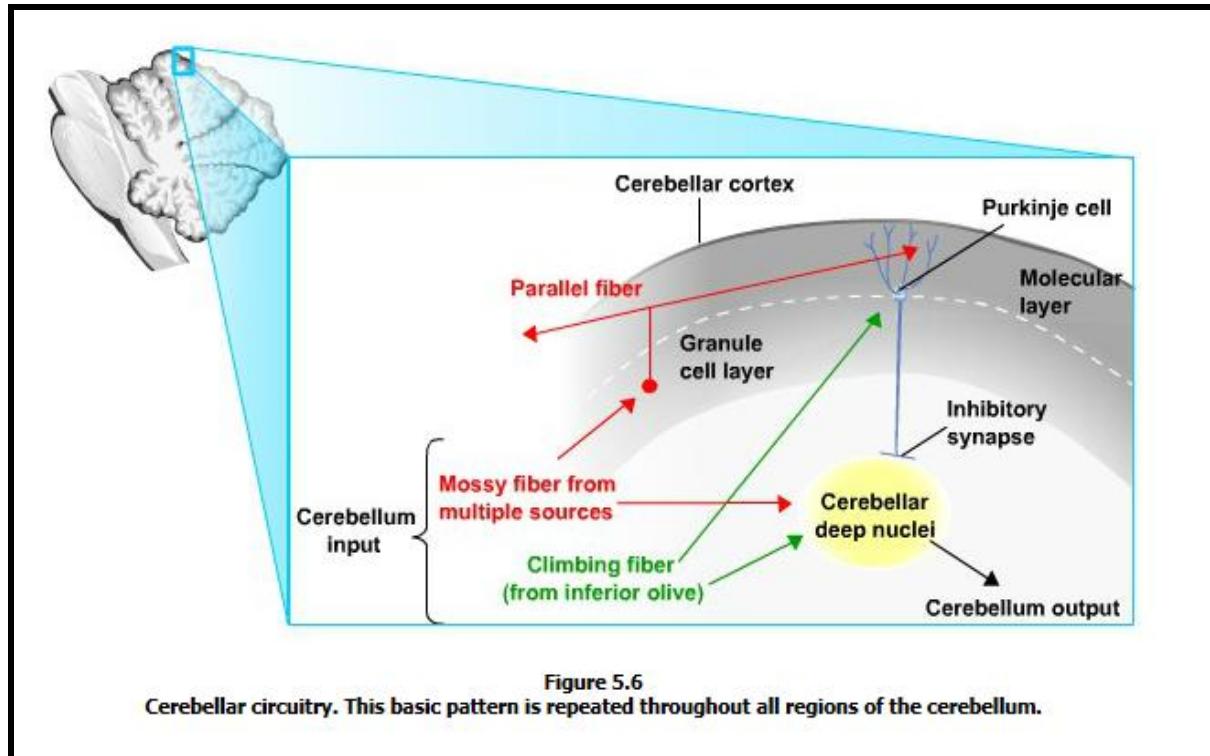
19. Dilantin has a propensity for the cerebellum. The specific binding site for phenytoin is in the vicinity of Purkinje cells and granule cells. Phenytoin induces increased firing rates in cerebellar neurons. The increased neuronal activity is harmful to cerebellar neurons. The neural target cells are stimulated by DPH to synthesize, at high rates, components of the cytochrome P-450 containing enzyme system. This inducibility and resulting overexpression of a cytochrome P-450 fraction correlate with the enlargement of SER compartments in cerebellar neurons during the course of phenytoin treatment.

20. The accumulation of vesicles and tubules in the distal regions of Purkinje cell axons leads to their local dilatation and can cause disturbances of synaptic transmission to cerebellar neurons. The selective vulnerability of cerebellar neurons to phenytoin documented by structural, functional and biochemical changes is the cause of severe motor disturbance and ataxia.

21. These pathophysiological mechanisms have been well-documented in the scientific literature and have been corroborated in human autopsy studies in patients with Dilantin-induced cerebellar atrophy.

22. The schematics below show the anatomy of the cerebellum and the cerebellar circuitry that is impacted by cerebellar atrophy:





23. The effects of cerebellar atrophy include, but are not limited to, the following:

- Gait/balance/walking/posture abnormalities: Difficulty maintaining normal upright posture, balance, coordinated walking, and running. Unsteady gait, staggering, tripping, falling, unsteadiness on stairs or maintaining balance.
- Fine motor incoordination: Difficulty with handwriting, cutting food, opening jars, buttoning clothes, sewing, typing, playing an instrument or sport.
- Speech and swallowing difficulties: Slurred, slow, indistinct speech, abnormal in rhythm. Difficulty swallowing or choking (dysarthria and dysphagia).
- Visual abnormalities: Blurred vision or double vision. Difficulty moving from word to word. Problems following moving objects or shifting gaze from one object to another.

- Increased fatigue: Unexpected fatigue when performing normal activities due in part to the need to expend more effort to perform activities that are no longer fluid or coordinated. Patients often report needing to “concentrate on” their movements.
- Cognitive and mood problems: Cognitive and emotional difficulties. The cerebellum plays a role in some forms of thinking. Patients with cerebellar atrophy may experience impaired recall of new information or difficulty with “executive functions” such as making plans and keeping thoughts in proper sequence. Personality and mood disorders, such as increased irritability, anxiety, and depression are more common in persons with cerebellar atrophy.

The devastating symptoms of cerebellar atrophy are permanent.

**D. Defendants Have Known That Dilantin Causes Cerebellar Atrophy for Over 70 Years**

24. For over 70 years, Defendants have known there is a causal relationship between Dilantin exposure and cerebellar atrophy. Despite Defendants’ safety signal analysis on the risk of cerebellar atrophy, scientific literature, and adverse event reports, Defendants’ Dilantin label did not mention the reaction – even once – until December 2015.

25. The scientific literature and studies establishing Dilantin as a cause of cerebellar atrophy include:

<b>1940</b>	<b>Williamson</b>	<b>1988</b>	<b>Botez et al.</b>
<b>1942</b>	<b>Finkelman</b>	<b>1989</b>	<b>Keier and Volk, et al.</b>
<b>1954</b>	<b>Livingston</b>	<b>1991</b>	<b>Abe, et al.</b>
<b>1958</b>	<b>Utterback, et al.</b>	<b>1994</b>	<b>Ney, et al.</b>
<b>1958</b>	<b>Hofmann</b>	<b>1994</b>	<b>Leuf et al.</b>
<b>1965</b>	<b>Kokenge</b>	<b>1998</b>	<b>Volk, et al.</b>
<b>1966</b>	<b>Dam</b>	<b>1998</b>	<b>Iivainen</b>
<b>1969</b>	<b>Logan and Freeman</b>	<b>1998</b>	<b>Pulliainen et al.</b>
<b>1974</b>	<b>Iivainen et al.</b>	<b>2000</b>	<b>Del Negro, et al.</b>
<b>1976</b>	<b>Ghatak et al.</b>	<b>2001</b>	<b>Tan, et al.</b>
<b>1977</b>	<b>Rappaport and Shaw</b>	<b>2003</b>	<b>De Marco, et al.</b>
<b>1977</b>	<b>Iivainen et al.</b>	<b>2004</b>	<b>Koller, et al.</b>
<b>1978</b>	<b>Heim, et al.</b>	<b>2011</b>	<b>Scorza, et al.</b>
<b>1980</b>	<b>McCain, et al.</b>	<b>2011</b>	<b>Scorza, et al.</b>
<b>1984</b>	<b>Lindvall, et al.</b>	<b>2013</b>	<b>Twardowschy, et al.</b>
<b>1984</b>	<b>Baier et al.</b>	<b>2013</b>	<b>Sharma, et al.</b>
<b>1988</b>	<b>Volk, et al.</b>	<b>2013</b>	<b>Gupta, et .</b>
		<b>2013</b>	<b>Shukla</b>

26. In addition to the articles cited above, four different case-control and a case-cohort study confirmed the causal relationship between Dilantin and cerebellar atrophy. The pertinent findings from these case-controlled studies are summarized below.

INCIDENCE/FREQUENCY OF CEREBELLAR ATROPHY FROM PHENYTOIN FROM CASE-CONTROL/COHORT OR CASE SERIES					
YEAR	STUDY TYPE	NO. PATIENTS/TYPE	PATIENTS WITH CEREBELLAR ATROPHY	INCIDENCE	
1977 <sup>17</sup> Jauhainen	Case Series using PEG and Serum concentrations	131 intellectually challenged patients	36/131	28%	
1988 <sup>18</sup> Bates	Case-control using CT scans and serum concentrations	134 patients with epilepsies in 3 groups, including mixed and pure cerebellar atrophy	68/106 chronic exposed	64%	
1994 <sup>19</sup> Ney	Case-control using MRI and serum concentrations	36 partial epilepsy patients with average intelligence free from seizures	21/36	58%	
1994 <sup>20</sup> Leuf	Case series using MRI and serum concentrations	11 patients with focal epilepsy and LGS free of seizures	5/11	45%	
2000 <sup>21</sup> Del Negro	Case-control (cohort) using CT scans and serum concentrations	66 patients with epilepsies free of seizures	18/66	28%	
2003 <sup>22</sup> DeMarco	Case-Control using MRI and serum concentrations	56 patients with epilepsies	20/56	35.7%	
2013 <sup>23</sup>	Case-control using MRI and genotyping for CYP2C9-mutant alleles	19 patients with epilepsies genotyped CYP2C9*2 or *3; 19 patients with epilepsies genotyped CYP2C9*1	4/19	21%	
			6/19	31%	

Cerebellar atrophy has an estimated prevalence/incidence of between 21% and 64% in these patients.

<sup>17</sup>Jauhainen, M. et al. "Cerebellar Atrophy in Phenytoin-Treated Mentally Retarded Patients," *Epilepsia*, 18(1): 375-386 (1977).  
<sup>18</sup>Bates, M. "Cerebellar Atrophy in Epileptic Patients," *Can J Neurol Sci.*, 15:299-303 (1988).  
<sup>19</sup>Ney, G. et al. "Cerebellar Atrophy in Patients with Long-term Phenytoin Exposure and Epilepsy," *Arch Neurol.*, 52:767-773 (1994).  
<sup>20</sup>Leuf, G. et al., "Phenytoin Doseage and Cerebellar Atrophy in Epileptic Patients: Clinical and MRI Findings," *Eur Neurol.* 35(suppl 1):79-81 (1994).  
<sup>21</sup>Del Negro, A. et al., "Dose-Dependent Relationship Between Chronic Treatment With Phenytoin and Cerebellar Atrophy in Epilepsy Patients," *Arch Neuropsychiatry*, 58(4):279-285.  
<sup>22</sup>De Marco, FA. et al., "Cerebellar Volume and Long-term use of Phenytoin," *Sixence*, 12:312-315 (2003).  
<sup>23</sup>Hawdowiczko, GA. et al., "The role of CYP2C9 polymorphisms in phenytoin-related cerebellar atrophy," *Sixence*, 22:234-237 (2013).

27. In addition to the severe and permanent effects of cerebellar atrophy described above, the scientific literature attributes dozens of deaths to Dilantin/phenytoin-induced cerebellar atrophy. Even today, the Dilantin label does not warn of the risk of death from Dilantin-induced cerebellar atrophy.

#### **E. Time to Onset of Cerebellar Atrophy from Dilantin Exposure**

28. Numerous scientific studies have shown that the time to onset for the development of permanent, irreversible cerebellar degeneration and cerebellar atrophy can occur within one day to years after exposure to Dilantin.

29. Defendants have known for decades that chronic, long term therapy with Dilantin increases the risks of cerebellar degeneration and atrophy in people of all ages. Extensive human and animal studies also establish short term exposure to normal or high doses of Dilantin can

cause permanent, irreversible cerebellar degeneration and atrophy. Despite their longstanding awareness of these risks, Defendants have never warned of the risk of cerebellar atrophy from short-term or long-term Dilantin exposure.

30. **HUMAN EXPOSURE STUDIES**

PAPER/YEAR	TIME TO ONSET CEREBELLAR DAMAGE/ATROPHY	PATHOLOGICAL/ RADIOGRAPHIC EVIDENCE	AGE/SEX
1957-Utterback, RA-  Parenchymato us Cerebellar degeneration Complicating Dilantin Therapy”	3-4 weeks of exposure to  the therapeutic range of PHT	Clinical evidence	N/A  Seizure patient
1958-Hoffman, WH-  “Cerebellar Lesions after parenteral administration ”	16 days of exposure to Dilantin/Died  exposure to  the therapeutic range of PHT	Post-mortem exam showed exclusive pathological evidence of cerebellar degeneration, and ruled out other causes	28/F seizure patient
1977-Iivanainen, et al.  Cerebellar Atrophy in Phenytoin- Treated Mentally Disabled Patients  (See also Iivanainen- 1983 confirming short term onset)	30 days exposure to  the therapeutic range of PHT	PEG measurement of  4 <sup>th</sup> ventricle	Mean age was 16.3 years  (mentally disabled patients)
1977-Rappaport & Shaw	6 weeks exposure to  the therapeutic range of	Postmortem pathological examination of cerebellum confirmed cerebellar	47/F  With no seizure

<b>"Phenytoin-Related Cerebellar degeneration without seizures"</b>	<b>PHT</b>	<b>degeneration/atrophy</b>	<b>disorder</b>
<b>1984-Lindvall, et al.</b> <b>Cerebellar Atrophy following Phenytoin Intoxication</b>	<b>30 days exposure to the therapeutic range of PHT</b>	<b>CT scans. "In our opinion the protracted cerebellar dysfunction and the cerebellar atrophy demonstrated by CT Scans were closely related to short-term phenytoin intoxication."</b>	<b>25/m with no seizure disorder</b>
<b>1988-Botez, et al.</b> <b>"Cerebellar Atrophy in Epileptic Patients"</b>	<b>30 days exposure to the therapeutic range of PHT</b>	<b>CT scan confirming cerebellar atrophy within 1 month of starting Dilantin</b>	<b>N/A/</b>
<b>1990-Masur, et al.</b> <b>"Cerebellar Atrophy following Acute intoxication with Phenytoin"</b>	<b>1 day Overdose In Patient with no seizures</b>	<b>CT/MRI showed cerebellar atrophy findings similar to those findings of patients with chronic exposure to PHT, which means that acute exposure can cause CA</b>	<b>N/A</b>
<b>1992-Imamura, et al.</b> <b>"Cerebellar atrophy and persistent ataxia following acute intoxication of phenytoin"</b>	<b>4-7 weeks progressively developed on therapeutic doses of PHT</b>	<b>CT scans showed cerebellar atrophy after starting PHT for several weeks and CT performed before showed no cerebellar atrophy</b>	<b>39/M</b>
<b>1997-Kuruvilla, et al.</b> <b>"Cerebellar Atrophy After Acute Phenytoin"</b>	<b>Took twice the dose prescribed for 2-3 weeks at 600 mg per day</b>	<b>MRI showed cerebellar atrophy upon admission and other causes were ruled out</b>	<b>38/M</b>

<b>Intoxication”</b>			
<b>1998-Pulliaisen, et al.</b>  “A case of Cerebellar Atrophy after Phenytoin Intoxication, Neurologic, Neuroradiologic, and Neuropsychological Findings”	<b>Randomized controlled trial of patient who had 90 day exposure to therapeutic doses of PHT</b>	<b>CT scan showed severe cerebellar atrophy in a patient with prior CT scan that was normal just prior to starting PHT</b>	<b>17/F</b>
<b>1999-Awada, et al.</b>  “Residual cerebellar ataxia following acute phenytoin intoxication”	<b>10 day exposure to high doses of PHT</b>	<b>CT/MRI showed mild cerebellar atrophy</b>	<b>30/M</b>

**F. At-Risk Subpopulations**

31. Defendants have also known that certain subpopulations are particularly at risk for the development of cerebellar atrophy. These uniquely at-risk subpopulations include:

- pediatric population;
- people with intellectual disabilities and people with pre-existing brain injuries;
- pregnant women and infants;
- poor metabolizers;
- females; and
- the elderly population.

**1. Pediatric Population, the Intellectually Disabled, and Persons with Pre-Existing Brain Injuries are at Increased Risk**

32. Defendants have known that children, the intellectually disabled, and individuals with pre-existing brain injuries are at an increased risk of cerebellar atrophy from Dilantin. More

than 20 scientific articles have been published establishing the increased risk of cerebellar atrophy to these subpopulations from Dilantin. Despite this extensive literature, Defendants' Dilantin label did not reference cerebellar atrophy until December 2015. Even today, Defendants' Dilantin label – which first mentioned cerebellar atrophy less than two years ago – does not reference an increased risk to any subpopulation, including children, the intellectually disabled, or individuals with pre-existing brain injuries.

## **2. Poor Metabolizers of Dilantin and the Extended Half Life of the Drug**

33. Phenytoin has a narrow therapeutic window. As a result, a fine balance must be struck between efficacy and dose-related side effects. Any factor which changes the protein binding of phenytoin can alter phenytoin levels, resulting in significant neurotoxicity, including cerebellar degeneration and cerebellar atrophy.

34. Phenytoin demonstrates non-linear pharmacokinetics even within the therapeutic range. Specifically, the enzyme system involved in phenytoin metabolism gradually becomes saturated, resulting in a decrease in the rate of elimination of phenytoin as the dose is increased. This means that once the enzyme system becomes saturated with phenytoin, even a small change in the dose of phenytoin can lead to a large change in phenytoin levels and significant toxicity.

35. Further, phenytoin concentrations leading to enzyme saturation vary considerably between individuals. Thus, patients taking the same dosage can have up to a 50-fold difference in plasma phenytoin concentration (inter-individual variability). For these reasons, monitoring of phenytoin levels should be required to ensure therapeutic efficacy in every individual patient.

36. The long half-life of phenytoin also increases the risks of serious adverse effects, including cerebellar atrophy. The prescribing information for Dilantin or Epanutin (its E.U. equivalent) reports that the drug's half-life can range from 11-146 hours, with a typical half-life

of 20-60 hours. Half-lives of Dilantin can be prolonged with small dosages due to the saturation kinetics and resultant drug accumulation with reported half-lives of up to 500 hours.

37. Certain racial populations, including Caucasians and African Americans can possess a genetic predisposition that can render them unable to safely metabolize Dilantin. This genetic predisposition can lead to Dilantin toxicity even under normal dosing. Studies have shown that genetic testing can eliminate or reduce the potential for irreversible cerebellar atrophy. In order to prevent and monitor the elevated risk of cerebellar atrophy in poor metabolizers and other at-risk subpopulations, genetic testing should be performed prior to initiating therapy with phenytoin in epileptic patients.

### **3. Pregnant Women and Infants are at Increased Risk**

38. Defendants have known about the heightened risk of Dilantin-induced cerebellar atrophy and cerebellar degeneration to unborn fetuses and infants. By 1980, scientists reported an increased risk of cerebellar atrophy in fetuses or infants from mothers who took Dilantin during their pregnancies.<sup>2</sup> The validity of the causal connection is further evidenced through animal studies reflecting that phenytoin causes brain damage when administered early in development in laboratory animals.<sup>3</sup>

39. Despite their awareness of Dilantin's propensity to cause permanent life-long cerebellar injuries and even death to infants, the Dilantin label does not warn of the potential of injury and cerebellar atrophy in fetuses or warn that the drug should not be used when pregnant due to the risk of cerebellar atrophy.

<sup>2</sup> Mallow, et al. *Arch Pathol Lab Med* 104:215-218, 1980) (Gadisseux JF, "Pontoneocerebellar hypoplasia--a probable consequence of prenatal destruction of the pontine nuclei and a possible role of phenytoin intoxication," *Clin Neuropathol*. 1984 Jul-Aug; 3(4):160-7.

<sup>3</sup> Gestational exposure of PHT in rats can reduce whole brain weight (Tachniba, et al. 1996), delay maturation of reflexes (Dam 1972), and alter postnatal behaviors such as increased spontaneous locomotion Pizzi, et al. 1992), as well as learning impairments (Vorhees et al. 1987 and Adams, et al. 1990). (Hatta, et al., "Neurotoxic Effects of Phenytoin on Postnatal Mouse Brain Development Following Neonatal Administration," *Neurotoxicology and Teratology*, Vol. 21, No. 1, pp. 21–28, 1999).

#### **4. Females are at Increased Risk**

40. Defendants knew that females are at higher risk of cerebellar atrophy and to an increased susceptibility in females to Dilantin neurotoxicity, including cerebellar atrophy and peripheral neuropathy.

41. Defendants' Dilantin label to this day does not warn of the increased risk of cerebellar atrophy to females.

#### **5. The Elderly are at Increased Risk**

42. Defendants also knew the elderly population is also at an increased risk of cerebellar atrophy and related injuries from Dilantin.

43. Despite the elevated risk to these subpopulations, Defendants have not provided this safety information to the FDA, physicians or patients or revised their label to warn of the increased risk of cerebellar atrophy to the elderly.

#### **G. Folate Supplementation as an Available (But Undisclosed) Potential Treatment for Certain Patients with Cerebellar Atrophy**

44. Folate are forms of folic acid and B vitamins. Long-term phenytoin therapy can depress folate levels in serum, red blood cell, or cerebrospinal levels in a high proportion of patients. Phenytoin has also been shown to interfere with folate transport into the nervous system. Reduction in folate can increase the neurotoxicity from phenytoin and plays a role in the development of cerebellar ataxia and cerebellar atrophy.

45. Although folate therapy has emerged as a potential treatment for some patients with cerebellar atrophy, Defendants have not provided recommendations, directions for use, or warnings regarding the effects of reduced folate in phenytoin users to physicians or consumers.

46. Further, even though Defendants recommend the use of folate therapy for phenytoin patients who develop anemia, Defendants' label and safety communications do not

propose the use of folate supplementation to prevent or treat cerebellar degeneration or cerebellar atrophy.

**H. Defendants Tested Chantix as a Treatment for Cerebellar Atrophy**

47. Defendants developed and marketed Chantix as a smoking cessation drug. Chantix was approved by the FDA on May 10, 2006, and by 2008 sales had reached nearly \$900 million. In addition to marketing Chantix as a drug that reduces the urge to smoke, Defendants sponsored patents and several studies aimed at marketing (and profiting from) Chantix as an effective treatment for Dilantin-induced cerebellar ataxia.

48. Defendants' patent studies, patent applications, and analysis of the potential for off-label marketing of Chantix to treat cerebellar atrophy and its sequelae not only evidence Defendants' keen awareness of the risk of cerebellar atrophy from Dilantin, but also show that Defendants intend to profit from the treatment of cerebellar atrophy caused by their other drug, Dilantin.

**I. Dilantin Lacks Efficacy**

49. Dilantin has an extended regulatory history spanning nearly 80 years. Dilantin has been marketed in the United States since 1939 for the control of status epilepticus for grand mal seizures and the prevention and treatment of seizures during neurosurgery. Dilantin, however, was not approved by the FDA under the 1962 FDCA amendments that require proof of safety and efficacy based on two well-designed and controlled clinical trials. Instead, in 1970, the FDA issued a Drug Efficacy Study Implementation (DESI) notice informing phenytoin manufacturers that several different indications lacked efficacy and safety. At that time, the FDA announced that Parke Davis would be required to submit an NDA or SNDA to continue to

market certain forms of Dilantin. A few forms of Dilantin were approved through the DESI process in 1970, including NDA 10-151 and NDA 8-762.

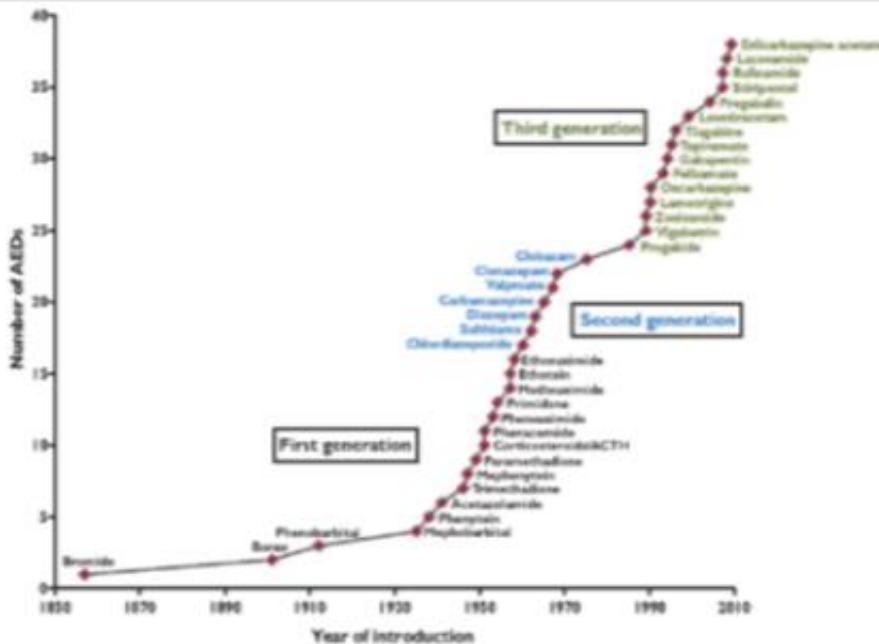
50. In 1976, the FDA issued an additional DESI notice that notified all phenytoin makers that the FDA considered phenytoin to be a new molecular entity that would require an NDA for all types of non-controlled release oral forms of phenytoin subject to the requirements of Section 505. Within the same DESI notice, the FDA notified manufacturers of all other forms of Dilantin, including combination products, that it would require an ANDA in order to continue marketing the product in the United States.

51. For the ANDA to be approved, all sponsors (including Parke Davis), were only required to show that the drug was bioequivalent to their reference standard for phenytoin dissolution and pharmacokinetics. As a result, Parke Davis has never conducted the full-scale clinical trials that it should have conducted to prove the efficacy and safety of Dilantin.

52. Thus, Parke Davis' ANDA 84-349 for Dilantin Kapsules, 30 and 100 mg. was approved in 1976, not based on two well-controlled trials that established safety and efficacy, but by merely showing that the product was bioequivalent to one of their own drugs, Dilantin.

53. Clinical and scientific evidence has revealed testing mechanisms that allow for the safer use of Dilantin. Specifically, genetic phenotyping or screening and detection of poor metabolizers are now readily-available safety options. Defendants, however, have never recommended genetic testing for at-risk subpopulations or U.S. consumers.

54. Since the introduction of Dilantin in 1939, the FDA has approved over 30 AEDs. The schematic below identifies the various anti-epileptic drugs approved and the length of time that they have been available to prescribing physicians in the U.S.:



**Figure 1.**

Introduction of AEDs to the market from 1853 to 2009 (adapted from data by Shorvon, 2009a,b). Licensing varied from country to country. We give here the year of first licensing or the first mention of clinical use in a country of Europe, the United States, or Japan (see Shorvon, 2009a,b, for further details). We have not included all derivatives of listed AEDs or AEDs used solely for treatment of status epilepticus.

55. Since Dilantin (a first-generation AED), came on the market in 1939, numerous other safer alternative AEDs have emerged. Several leading neurology expert panels in the U.S. and around the world have evaluated the risks and benefits of Dilantin and determined that it should not be used as a first line agent to treat seizure disorders.

56. The International League Against Epilepsy (ILAE) is the world's preeminent scientific body devoted to the study of epilepsy. In 2005, experts retained by the ILAE analyzed the scientific data for efficacy of AEDs. Following this review, the ILAE concluded that i) no randomized controlled clinical trials existed to establish the efficacy of phenytoin to treat seizure disorders, and ii) it would not recommend phenytoin as a first-line treatment for seizures.

57. The National Institute for Health and Care Excellence (NICE) is the independent organization based in the United Kingdom responsible for providing evidence-based guidance on health care. Based on its review of randomized clinical trials and meta-analyses of published papers, NICE also does not recommend phenytoin as a first-line drug for any seizure type or epilepsy syndrome.<sup>4</sup>

58. In December 2016, Pfizer and its U.K. affiliate, Flynn Pharma Ltd., were fined \$106 million by the U.K.'s Competition and Markets Authority for abusing their dominant market position in the U.K. through charging unfair prices for Epanutin, a generic version of Dilantin. As a part of its investigation, the Competition and Markets Authority produced a 500+ page memorandum decision. In addition to detailing the unlawful 2,600% price hike that Pfizer and Flynn implemented for Epanutin, the decision commented on the efficacy of Dilantin/Epanutin as follows:

3.43 Phenytoin sodium has been superseded by a number of newer medicines with improved efficacy, fewer side effects and/or better safety profiles. This has meant that older drugs like phenytoin sodium are not the first – or second – choice treatment for epilepsy. As a result, in any given period, very few patients are newly prescribed phenytoin sodium capsules.

59. The bottom line is that Defendants' drug lacks efficacy and, particularly given its many serious side effects, should be restricted or taken off of the market. Indeed, even Defendants' own neurology experts concede that Dilantin should not be recommended as a first line therapy for many seizure disorders due to the availability of safer and more effective alternatives.

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<sup>4</sup> NICE Clinical Guideline, "Epilepsies: diagnosis and management," (2004); and Brostoff, et al. "Phenytoin toxicity: an easily missed cause of cerebellar syndrome," J Clin Pharm and Therap. (2008); 33:211-214; NICE Clinical Guideline, "Epilepsies: diagnosis and management," (2012).

**J. Defendants' Deceptive Marketing Strategies**

60. Defendants have aggressively marketed Dilantin for decades and made billions of dollars as a result. To reap these profits, Defendants have distributed thousands of books, bulletins, and brochures across the U.S. that falsely promoted Dilantin as safe and effective in the treatment of all types of seizures. Defendants did not disclose any safety information regarding the risks of cerebellar atrophy in any of these publications.

61. For 80 years, Defendants' Dilantin advertisements have targeted the poor, intellectually challenged, children, and adults by promoting Dilantin as a life-changing super drug that could improve the quality of their lives by controlling seizures. At the same time, however, Defendants knew that these subpopulations were at increased risks of cerebellar atrophy, yet failed to warn them of those heightened risks, choosing instead to represent that Dilantin was safe to use when they knew that it was not.

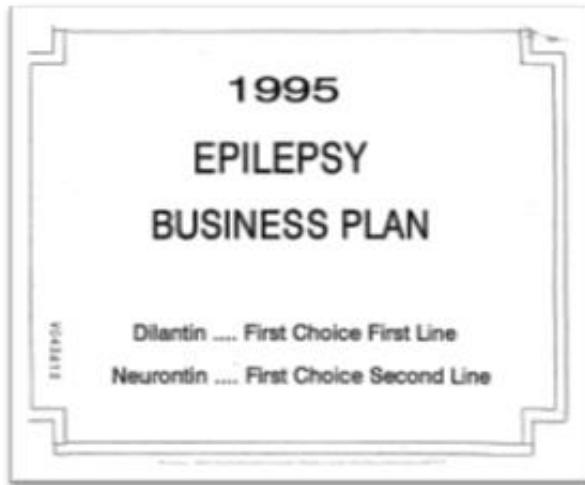
62. In 1982, Parke Davis targeted a national marketing campaign at the elderly, introducing a Parke Davis program called Elder-Care to encourage older patients to ask health care practitioners for help in managing their medications. Components of the program, which was distributed to pharmacists in every state in the U.S., included the Elder-Care symbol and patient information booklets entitled "*As We Grow Older.*"

63. Another brochure developed by Parke Davis in 1983 was entitled "*How to Select Your Pharmacy and Pharmacies,*" which collected prescribing and use information from elderly patients. Nowhere in these publications did Parke Davis disclose to elderly patients the risk of cerebellar atrophy from Dilantin.

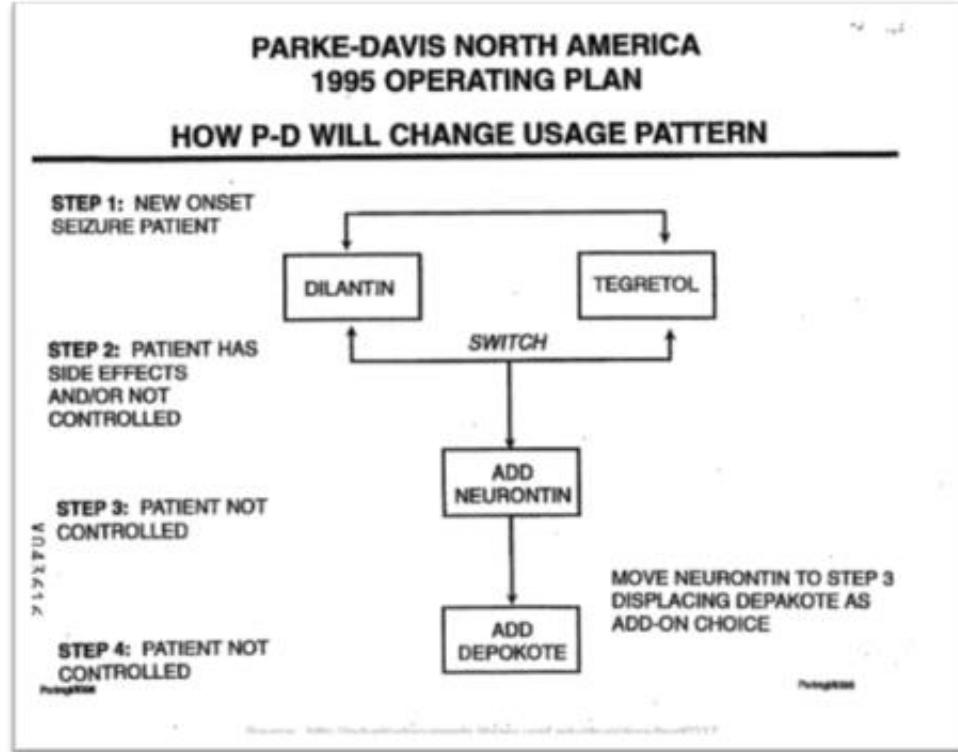
64. In 1992, Parke Davis published its *Manual on Epilepsy*, a marketing manual disguised as a paperback book on public health educational information. The book falsely

promoted Parke Davis and the safety profile of Dilantin without disclosing its risk of cerebellar atrophy.

65. Parke Davis and Warner Lambert implemented broad strategies for the marketing of Dilantin from the 1960's through 2005. In 1995, Parke Davis developed its company Epilepsy Business Plan as shown below:



66. Parke Davis used resources from marketing Dilantin from the previous decades to aid in the development and marketing of Neurontin alongside Dilantin. The publicly available Parke Davis business plan from 1995 noted Defendants' intent to identify and target physicians in the U.S. who prescribed the most Dilantin.

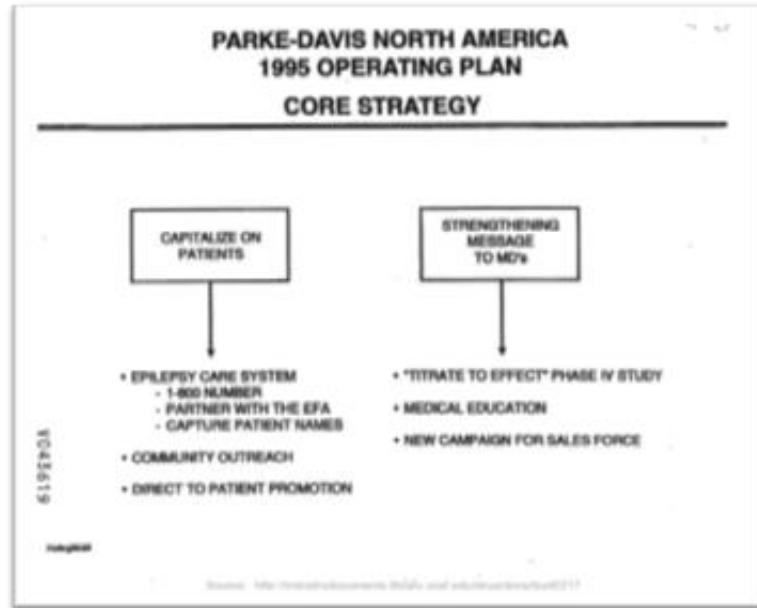


67. One of Parke Davis/Warner Lambert's core strategies was to "Capitalize on Patients" and "strengthen[] Messages to MDs."

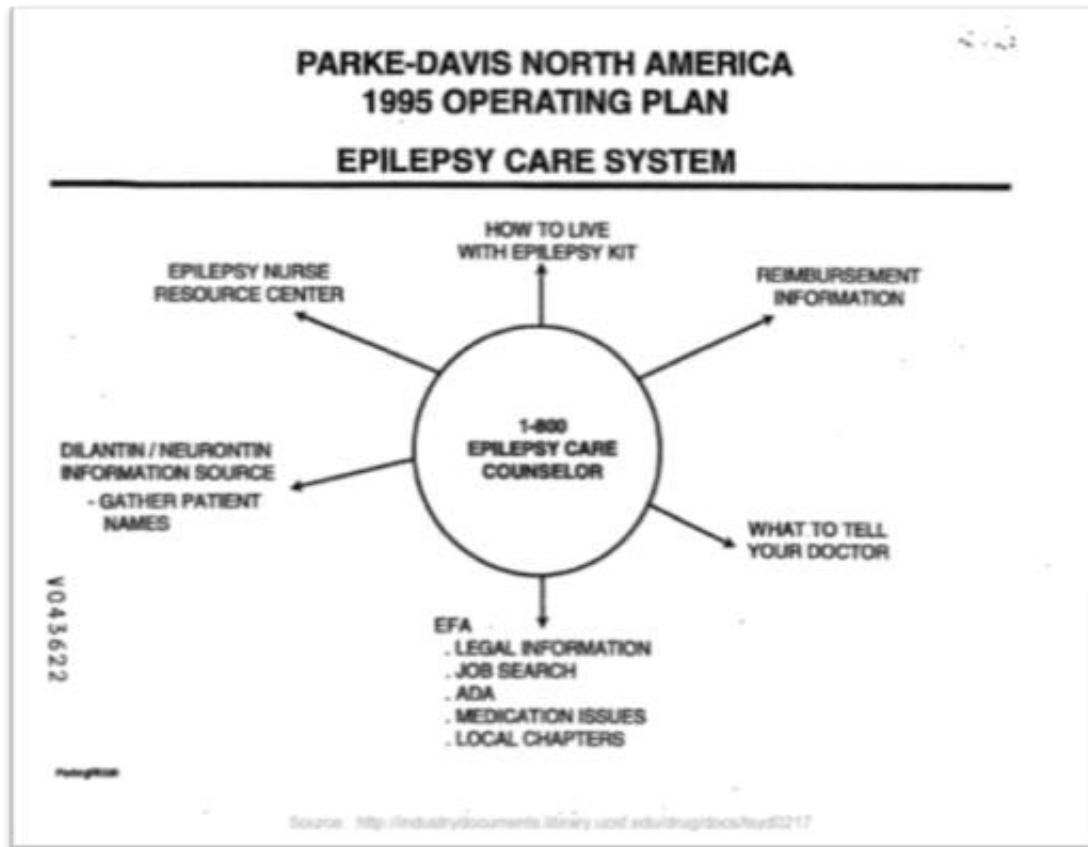
68. To “capitalize on patients,” Defendants used the Epilepsy Care System, whereby Parke Davis staffed paid patient advocates with the Epilepsy Foundation of America (EFA). The EFA was supposed to be an independent non-profit organization dedicated to assist individuals with epilepsy with drug selection and healthcare decisions. Far from being independent, Defendants’ paid staffers would direct patients to receive free Dilantin over epilepsy drugs made by other drug companies. In addition to marketing their product to unsuspecting consumers, during this process Parke Davis did not disclose the risks of cerebellar atrophy to physician or patients.<sup>5</sup>

69. Also, in 1995, a similar system was developed by Parke Davis as shown below:

<sup>5</sup>The EFA was not the only nonprofit foundation Parke Davis cooperated with in an effort to increase Dilantin sales. The Dreyfus Health Foundation f/k/a the Dreyfus Medical Foundation was another such organization. Through the Dreyfus Medical Foundation, Parke Davis explored multiple off-label uses for Dilantin.



70. Defendants have, for many decades, communicated to patients directly using the EFA and through sponsored physicians in order to fraudulently promote Dilantin as a safe and effective medicine that would change their lives. In doing so, Defendants consciously concealed the risks of cerebellar atrophy caused by Dilantin. The schematic below outlines the mechanics of the Parke Davis business plan for its Epilepsy Care System:



71. As indicated in the Parke Davis business plan, the EFA played a large role in persuading patients to choose Dilantin to treat their seizure disorders. Parke Davis also used the EFA to collect information about the use of Dilantin products by these individuals which, in turn, would help Defendants increase sales of the drug.

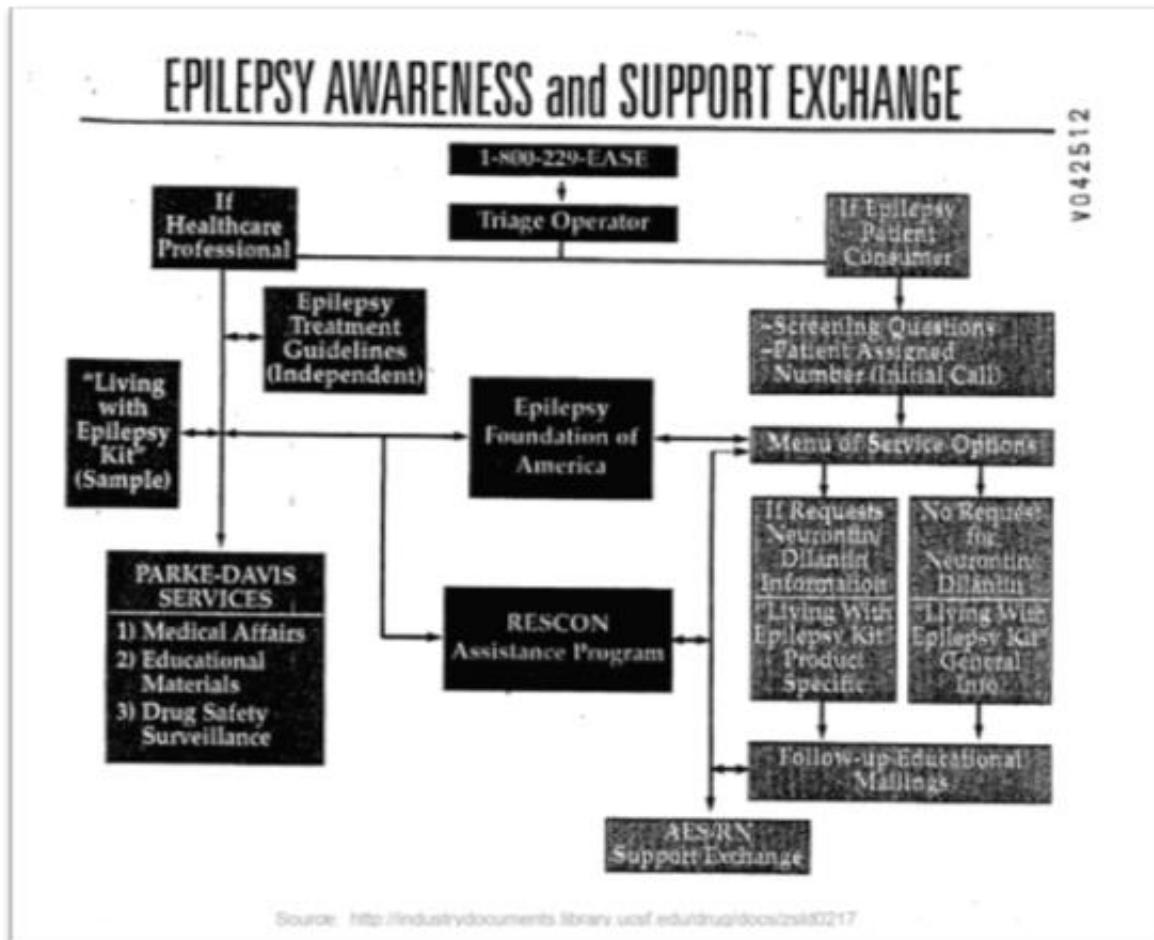
72. Parke Davis developed tactical planning strategies to implement various marketing instruments promoting Dilantin. For example, and without ever mentioning the risk of cerebellar atrophy, Parke Davis promoted Dilantin using reprints of articles that reported favorable use of Dilantin; medical anatomical references; neurology residents training kits; Merritt-Putnam pads; patient information sheets; and flash cards attacking competitor drugs, including Tegretol. Parke Davis also developed several series of videos to use with patients,

including “*Under Complex Partial Seizures*,” or “*The Rest of the Family*”, or “*Planning for Today*,” or “*1<sup>st</sup> Aid for Seizures*,” and used videos that targeted children with seizures that promoted Dilantin, including “*School Planning for Children*,” or “*Seizure, Epilepsy and Your Child*. ” None of these promotional materials warned of the risk of cerebellar atrophy.

73. Parke Davis paid for and established a national system called the *Epilepsy Awareness and Support Exchange or EASE*. The program focused on key customers that purchased Dilantin in large quantities, such as HMOs and hospitals. Parke Davis executed the EASE program between 1995-2005 as described below.

74. When a physician called the national EFA hotline, they would be provided with the Parke Davis treatment guidelines and a *Living with Epilepsy Kit* for their patients. The Epilepsy Foundation would also provide the physicians and patients with information directing them to the *RESCON* patient assistance program, which was Parke Davis’s third-party vendor that would partner with Parke Davis to provide Dilantin at a lower cost. The physician would also be provided treatment guidelines that recommended using Dilantin as the first line agent.

75. When a patient called the EFA hotline, they would be screened for information that Parke Davis desired to collect in order to better-market Dilantin and their other AEDs. The patient would receive direct Parke Davis mailings and kits, which were educational materials disguised to market Dilantin. None of these marketing materials contained information regarding the risks of cerebellar atrophy. Below is a diagram of the Parke Davis *EASE* program:



76. Parke Davis Epilepsy Guidelines were also created to ensure priority use or prescribing of Dilantin as evidenced below:

## PHYSICIAN EPILEPSY TREATMENT GUIDELINES

- ▶ Highlights:
  - ▶ Define current treatment guidelines
  - ▶ Insure priority use Dilantin/Neurontin
  - ▶ Customize for key institution in each CBU
  
- ▶ Tactics:
  - ▶ Multidisciplinary Advisory Board
    - ▶ Epileptologist/Neurologists
    - ▶ Manage Care
    - ▶ Primary Care
  - ▶ CME
    - ▶ Supplements
    - ▶ Slide Kit
  - ▶ Implementation
    - ▶ CBUs
    - ▶ NAMs
    - ▶ National Speakers Bureau
    - ▶ Audioconferences

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Furnished under the Freedom of Information Act by the U.S. Food and Drug Administration

77. Parke Davis identified several groups of physicians for targeted marketing. One such group was physicians who frequently prescribed Dilantin, categorized by the dollar value of Dilantin prescriptions they had the potential to generate. Another key group was physicians who had the potential to influence Neurontin or Dilantin use among their colleagues. This included local champions of the drug, who were recruited and trained to serve as speakers in “peer-to-peer selling” programs, which were noted to be “one of the most effective ways to communicate [Parke Davis] message” about Dilantin first, then Neurontin. Parke Davis also targeted residents who could be used “to influence physicians from the bottom up” and “to solidify Parke Davis’ role in the resident’s mind as he/she evolves into a practicing physician.”

78. Educational activities were also used to implement strategic goals. Teleconferences linking paid physician moderators with small groups of physicians was another method used to reach prescribers. Although these teleconferences were titled as educational

events, Parke Davis internal memos noted that “the key goal of the teleconferences was to increase Dilantin and Neurontin new prescriptions by convincing non-prescribers to begin prescribing and current prescribers to increase their new prescription behavior.”

79. Speakers bureaus and related programs were other physician-to-physician activities developed by Defendants to promote Dilantin and Neurontin. Sales employees were encouraged to “expand the speaker base—identify and train strong Dilantin and Neurontin advocates and users to speak locally for Dilantin Neurontin”.

80. Parke Davis also organized Merritt-Putnam lecture series to improve “public relations within the neurology community, etc., as well as [to impact] the volume of Dilantin and Neurontin new prescriptions.” The speakers bureau for this lecture series included chairs of neurology departments and directors of clinical programs at major teaching hospitals. Members of the speakers bureau were invited to special meetings where, in addition to lectures on the clinical use of Dilantin, they were updated on promotional strategies for the drug. Parke Davis also created a National Speaker’s Bureau to falsely promote the safety and efficacy of Dilantin as evidenced in their business plan.

81. Parke Davis sought to provide unrestricted educational grants to locally organized symposia at which it expected Dilantin or gabapentin to be favorably discussed. One memo recommended the following: “Assist in the organization of a [major university hospital’s] pain symposium . . . We will probably write them an unrestricted educational grant to help fund the project. In return, they will discuss the role of Neurontin in neuropathic pain and Dilantin use, among other topics. They do have a very favorable outlook toward Dilantin and Neurontin.”

82. Pfizer acquired Warner-Lambert and its Parke Davis division in 2000 for \$91 billion. As a part of the acquisition, Pfizer acquired Warner-Lambert’s products, including its

neurological products such as Dilantin, Cerebyx and Neurontin. After the purchase, Pfizer continued the Parke Davis business plans described above.

83. In May 2004, as a direct result of the above-described conduct, Warner-Lambert pled guilty to off label marketing and promotion and agreed to pay over \$430 million to resolve criminal charges and civil liabilities in connection with its illegal and fraudulent promotion of unapproved uses of Neurontin – the AED marketed side-by-side with Dilantin. The settlement agreement included a Corporate Integrity Agreement, requiring Pfizer to train and supervise its marketing and sales staff to protect against future off-label marketing conduct.

**K. Defendants Performed and Ignored Their Own Safety Signal Analysis for Dilantin-Induced Cerebellar Atrophy**

84. In 2009, one of Pfizer's chief safety signal experts, Manfred Hauben, M.D., performed a safety signal analysis of the risk of cerebellar atrophy from Dilantin.<sup>6</sup> That same year, Dr. Hauben and another Pfizer safety signal expert, Dr. Andrew Bates, published an article describing methods by which drug companies are able to use their internal safety databases to explore and detect safety signals, including signals for cerebellar atrophy. Highlights from that article are below:

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<sup>6</sup> Hauben and Bates, Decision Support Methods For the Protection of Adverse Events in Post-Marketing Data, Drug Discovery Today (2009)

### Methodologies to interrogate the data

Reported ADRs may stand out and be selected as possible signals for various reasons, both clinical and quantitative. The clinical criteria and heuristics used in pharmacovigilance have been discussed in detail elsewhere [26–28].

We focus on ADRs that first come to attention only after accumulation of a crucial mass of cases. Determining this crucial mass is the key conundrum in signal detection and where quantitative approaches based on computer-based statistical calculations can help.

Contemporary computer algorithms in pharmacovigilance primarily perform what is commonly called 'disproportionality analysis'. Key to understanding this analysis is the  $2 \times 2$  contingency table that classifies reports according to the presence/absence of the suspect drug of interest and the presence/absence of the event of interest in reports (for example phenytoin and cerebellar atrophy in Table 1). It summarizes the number of cases in the database that list phenytoin as suspect drug and cerebellar atrophy as the event, the number of reports listing phenytoin with other events, the number of reports of all other drugs listing cerebellar atrophy and the number of reports listing any other drug and any other event. The vast majority of reports will fall into the last category (cell D). Given the sparsity of SRS databases and a focus on rare adverse events in pharmacovigilance, cell A will have the fewest reports. A similar table can be constructed for every possible drug-event combination (drug-event combinations with no reports will have the cell count  $A = 0$ ).

**TABLE 1**  
Contingency table used in disproportionality analysis

	Reports listing cerebellar atrophy	Reports Not all other events	Total
Reports listing phenytoin	A	B	A + B
Reports for all other drugs	C	D	C + D
Total	A + C	B + D	A + B + C + D

www.pharmacoepi.com 345

85. Dr. Hauben's analysis prompted Pfizer to change its Dilantin labels to warn about cerebellar atrophy in foreign countries, but not in the U.S. By at least 2009, Defendants were (i) aware of cerebellar atrophy as an adverse effect of their drug, (ii) performed a safety signal

analysis, and (iii) knowingly chose not to change their U.S. label to warn of the risk after the safety signal was detected.

**L. Known and Uncured Manufacturing Defects**

86. Since 1990, there have been a total of 64 recalls of Warner Lambert products for manufacturing and other defects. Several of these recalls included Dilantin products. In 1993, the company agreed to a consent decree that halted the manufacture of several drugs (including certain Dilantin product) while its manufacturing processes were changed to comply with law. In 1995, Warner-Lambert pled guilty to criminal charges and agreed to pay a \$10 million fine for hiding data from the Food and Drug Administration regarding faulty manufacturing processes used for several of its drugs, including Dilantin. The violations were so significant that Warner-Lambert's former vice president for quality control was indicted on criminal charges alleging that he was involved in an attempt to hide failures in quality control.

87. After Pfizer acquired Warner-Lambert and Parke Davis for \$91 billion in 2000, Pfizer became bound to the 1993 Consent Decree. Pfizer consented to a Remedial Action Plan that required Defendants to comply with Good Manufacturing Processes required by FDA regulations for the manufacturing of Dilantin products.

88. On December 15, 2005 – twelve years after Defendants represented they would resolve their quality control issues – Pfizer submitted a Supplemental New Drug Application 84-349/S-045 to the FDA seeking approval for a different manufacturing process to manufacture Dilantin Kapseals (extended release sodium phenytoin 100 mg) into a form of Dilantin called Dilantin Capsules. Through this submission, Pfizer reformulated Dilantin 30 mg and 100 mg Kapseals without disclosing the reformulation to U.S. consumers and healthcare providers.

Pfizer, however, did disclose the reformulation to consumers and prescribing physicians in other countries, including in Canada, through Dear Healthcare Provider letters.

89. In doing so, Pfizer unilaterally altered the manufacturing process for Dilantin Kapseals 100 mg into a different form of the drug (Dilantin Capsules) that utilized phenytoin sodium. Pfizer subsequently filed an Amendment to SNDA 84-349/S-045 notifying the FDA that the new manufacturing changes and enhancements were developed primarily to address manufacturing concerns that were the subject of the 1993 consent decree between the FDA and Warner-Lambert.

90. The FDA rejected the submission and the bioequivalence studies due to the poor quality of both the data and submissions. Ultimately the submission was approved by the FDA Office of Generic Drugs, Division of Bioequivalence on August 7, 2006.

91. On October 15, 2007, Pfizer entered into an Amended Consent Decree regarding the manufacturing deficiencies for Dilantin 30 mg and Dilantin 100 mg capsules. In this Amended Consent Decree, Pfizer admitted that (even after 14 years) it had not completed the certifications and remedial action plans that were the subject the 1993 consent decree.

**M. Defendants Were Cited by the FDA for Failing to Review, Analyze, and Report Serious Adverse Drug Events**

92. Section 505(k)(1) of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. § 355(k)(1); *see also* 21 CFR 314.80 and 314.81] require Defendants to establish and maintain records and to report data relating to clinical experience, along with other data or information, for drugs for which an approved application is in effect. Failure to comply with Section 505(k) is a prohibited act under Section 301(e) of the Act [21 U.S.C. § 331(e)].

93. Following a 2009 inspection, the FDA issued a warning letter to Pfizer noting serious violations relating to Dilantin and other products, including the following:

- Serious and unexpected ADE reports are not promptly investigated as required by 21 CFR 314.80(c)(1)(ii).
- Failure to submit 15-day Alert reports for serious adverse drug experiences as a non-applicant to the applicant within 5 calendar days of receipt as required by 21 CFR 314.80(c)(1)(iii).
- Failure to promptly review all adverse drug experience information obtained or otherwise received by the applicant from any source as required by 21 CFR 314.80(b).

94. Defendants failed to promptly investigate, review and report to the FDA ADE reports of cerebellar atrophy from Dilantin exposure.

N. **Defendants Have Known that Dilantin Causes Cerebellar Atrophy and Failed to Warn of the Risk**

95. As noted above, Defendants are required to conduct adequate post approval safety surveillance for all of their drugs, including Dilantin, by collecting and evaluating aggregated safety data and scientific literature relating to the adverse effects of their drugs. Defendants are required by law to analyze and determine whether safety signals exist; to report those safety findings to the FDA; to continuously revise or update their product labels; and to provide an identification of the current risks associated with Dilantin in order to allow for the safe and effective use of the product, including warning for the risk of cerebellar atrophy and its related conditions.

96. Scientific studies and peer reviewed literature positively identify a direct causal link and/or association between Dilantin and cerebellar atrophy which Defendants knew or, at a minimum, should have known about, and should have but did not disclose to the FDA and U.S. healthcare providers.

97. Defendants have had ample opportunity to change their label to provide adequate warnings regarding cerebellar atrophy and sufficient instructions on the safe use of Dilantin. Indeed, using SNDAs and CBEs, Defendants have changed the Dilantin label numerous times to warn of other adverse reactions. During this same time frame, Defendants provided better warnings and more information on related conditions in foreign countries, as evidenced by the labeling for Dilantin and Epanutin products in other countries, including Australia, Canada and Japan. Pfizer also distributes Patient Information Leaflets directly to Dilantin consumers in the E.U. that refer to symptoms of cerebellar atrophy. Pfizer, however, does not provide this information to U.S. patients.

98. Medication Guides presented another opportunity for Defendants to warn of these risks. Medication Guides are patient labeling (21 CFR part 208) which accompany drugs deemed by the FDA to have serious and significant risks. Medication Guides address issues that are specific to particular drugs or drug classes. They contain FDA-approved information that can help patients avoid serious adverse reactions. Medication Guides are developed by manufacturers, reviewed by the FDA, and are required to be distributed by pharmacies with each prescription. Defendants should have developed a Medication Guide for Dilantin, independently, to include specific warnings regarding cerebellar atrophy, ataxia and the associated neurocognitive impairments. Dilantin's Medication Guide does not warn about cerebellar atrophy, ataxia and the associated neurocognitive impairments. Nor does it warn about the risks associated with the duration of therapy (or chronic exposure) or of the toxicological consequences to the brain and central nervous system from cerebellar atrophy.

99. Defendants should have (but did not) undertake safety surveillance analyses to include a comprehensive analysis of the available scientific literature, epidemiological studies or

employ data mining techniques using various modalities to assess the risks of prolonged therapy of Dilantin and cerebellar atrophy that has been associated with their Dilantin products.

100. While Dilantin is the leading drug-induced cause of cerebellar atrophy, other drug companies who market epilepsy drugs warn about the risk of cerebellar atrophy. For example, AbbVie's Depakote (another anti-epileptic drug) label warns about the potential for cerebellar atrophy in the warnings section of its drug's label. Notably, AbbVie's warning is based on case reports and, although Depakote rarely causes cerebellar atrophy and almost all of the Depakote cases improve on discontinuation of the drug, AbbVie has warned of this risk for years.

101. Defendants had and have a duty to collect, review, and disclose all relevant scientific and safety information as well as to provide adequate directions for the safe and effective use of Dilantin pursuant to 21 C.F.R. 314.80 and 314.81. Defendants also had and have a duty to provide adequate warnings and directions for use pursuant to 21 C.F.R. 201.5, 201.56, 201.57, 208, and could have revised their labeling over the last decades pursuant to 314.70, including adding new warnings and improved direction for use to Plaintiff, her prescribing physicians, and U.S. healthcare professionals with regard to the risk of permanent, irreversible cerebellar atrophy and related neurological injuries associated with Dilantin, including irreversible neurotoxicity, dysarthria (speech impairment), cognitive injuries and ataxia.

102. As a direct result of the wrongful acts and omissions listed above and Defendants' deficient and inadequate warnings, Plaintiff's prescribing physicians were deprived of the ability to fully assess the risks and make an informed decision about prescribing Dilantin to Plaintiff. Had Plaintiff or his prescribing physicians been made aware of the known risks and dangers associated with Dilantin or the availability of safer alternatives, or had Defendants

disclosed such information to Plaintiff or her prescribing physicians, Plaintiff would not have taken Dilantin and would not have suffered the permanent and life-altering injuries at issue.

**Equitable Tolling of Statute of Limitations**

103. Plaintiff incorporates by reference all prior paragraphs of this Complaint as if fully set forth herein.

104. The running of the statute of limitations is tolled under Massachusetts law by reason of Defendants' fraud and fraudulent concealment. Defendants, through their affirmative misrepresentations and omissions, actively concealed from Plaintiff and Plaintiff's prescribing physicians the true risks associated with Dilantin. As a result of Defendants' actions, Plaintiff and Plaintiff's prescribing and treating physicians were unaware, and could not reasonably known or have learned through reasonable diligence, that Plaintiff had been exposed to the risks alleged herein and that the neurological sequelae, including irreversible cerebellar atrophy, cerebellar ataxia, cerebellar degeneration, dysarthria, and other cognitive injuries were the direct and proximate result of Defendants' acts and omissions.

105. Defendants are estopped from relying on any statute of limitations because of their fraudulent concealment of the true risks of cerebellar atrophy, cerebellar ataxia, cerebellar degeneration, dysarthria, cognitive injuries and related sequelae associated with Dilantin. The risks identified herein involve non-public information over which Defendants had and have exclusive control. Defendants knew that this safety information was not available to Plaintiff and Plaintiff's prescribing physicians. Because Defendants concealed the risks of cerebellar atrophy, permanent cerebellar ataxia, cerebellar degeneration, dysarthria, cognitive injuries and related sequelae associated with Dilantin products, Plaintiff and her prescribing physicians were not aware of the risks and were unable to positively conclude that Dilantin was the cause of

Plaintiff's injuries and damages until recently, within the statute of limitations. Instead, Plaintiff was advised for years that her injuries were caused by illnesses and diseases other than Dilantin. Defendants' misrepresentations of safety and efficacy included the false representation that, if Plaintiff suffered acute episodes of Dilantin toxicity based on high serum levels of Dilantin, her side effects would be reversible and entirely resolve if Plaintiff briefly stopped taking Dilantin and resumed Dilantin therapy at a later date. Defendants are estopped from relying on any statute of limitations because of their intentional concealment of these facts.

106. Plaintiff had no knowledge that Defendants were engaged in the wrongdoing alleged herein. Because of Defendants' fraudulent acts and concealment, Plaintiff and her prescribing physicians could not have reasonably discovered the wrongdoing at an earlier date. Further, the economics of the fraud must be considered in context. Defendants had the ability to and did spend enormous amounts of money in furtherance of their purpose of marketing, promoting and/or distributing their blockbuster drug Dilantin, notwithstanding the known or reasonably known risks. Plaintiff and her prescribing physicians could not have afforded and could not have reasonably conducted studies to determine the nature, extent and identity of the health risks at issue in this Complaint and, instead, were required to and did rely on Defendants' representations. Accordingly, Defendants are precluded by the discovery rule, estoppel and/or the doctrine of fraudulent concealment from relying upon any statute of limitations.

**V. CAUSES OF ACTION**

**FIRST CLAIM FOR RELIEF**

**STRICT PRODUCT LIABILITY - FAILURE TO WARN**

107. Plaintiff incorporates by reference each and every paragraph of this Complaint as though set forth in full in this cause of action.

108. Defendants manufactured, marketed, distributed and supplied Dilantin. As such, Defendants had a duty to warn the public including Plaintiff and her prescribing physicians of the health risks associated with using Dilantin.

109. Dilantin was under the exclusive control of Defendants and was sold without adequate warnings regarding the risk of cerebellar atrophy and related neurological sequelae, including ataxia and persistent loss of locomotion, including in individuals with underlying balance disturbances and cognitive dysfunction.

110. As a direct and proximate result of the defective condition of Dilantin and its label, as manufactured and/or supplied by Defendants, Plaintiff suffered injury, harm, and economic loss as alleged herein.

111. Defendants knew of the defective nature of Dilantin but continued to design, manufacture, market, and sell Dilantin in order to maximize sales and profits at the expense of public health and safety. Defendants' knowing, conscious, and deliberate disregard of the foreseeable harm caused by Dilantin violated their duty to provide accurate, adequate and complete warnings.

112. Defendants failed to warn the public, Plaintiff and Plaintiff's prescribing physicians of the dangerous propensities of Dilantin, which were known or should have been known to Defendants, as they were scientifically readily available. Defendants failed to comply with FDA regulations governing prescription labeling, including 21 C.F.R. 201.56, 201.57, 314.70, 314.80, 314.81 and 201.80. Further, Defendants had the ability to request and obtain a patient Medication Guide that could have provided adequate warnings of the risks referenced herein.

113. Defendants knew and intended that Dilantin would be prescribed by physicians and would be used by persons. Defendants also knew that physicians and users such as Plaintiff would rely upon the representations made by Defendants in the Dilantin product labels and in Defendants' promotional and sales materials, upon which the Plaintiff's prescribing physicians did so rely.

114. As a direct and proximate result of Defendants' sale of Dilantin without adequate warnings regarding the risk of cerebellar atrophy and related sequelae, Plaintiff suffered injury and harm as alleged herein.

115. Defendants' conduct in the packaging, warning, marketing, advertising, promotion, distribution and sale of Dilantin was committed with knowing, conscious, and deliberate disregard for the rights and safety of consumers such as Plaintiff, thereby entitling Plaintiff to punitive damages in an amount to be determined at trial that is appropriate to punish Defendants and deter them from similar conduct in the future.

#### **SECOND CLAIM FOR RELIEF**

##### **STRICT PRODUCT LIABILITY – DEFECTIVE DESIGN AND MANUFACTURING DEFECT**

116. Plaintiff incorporates by reference each and every paragraph of this Complaint as though set forth in full in this cause of action.

117. Defendants were the manufacturers, labelers, sellers, distributors, marketers, and/or suppliers of Dilantin, which was defective and unreasonably dangerous to consumers.

118. Defendants' product was labeled, sold, distributed, supplied, manufactured, marketed, and/or promoted by Defendants, and was expected to reach and did reach consumers without substantial change in the condition in which it was manufactured and sold by Defendants.

119. The Dilantin manufactured, labeled, supplied, and/or sold by Defendants was defective in design or formulation in that when it left the hands of the manufacturers and/or sellers it was unreasonably dangerous and its foreseeable risks exceeded the benefits associated with its design or formulation. The foreseeable risks of Dilantin exceeded the benefits associated with the designs or formulations of the product.

120. Upon information and belief, Defendants knew of the defective nature of Dilantin but continued to design, manufacture, market, and sell it so as to maximize sales and profits at the expense of public health and safety.

121. There were safer alternative methods and designs for the manufacture of Dilantin products. For example, Defendants failed to design Dilantin products to meet their own formula and manufacturing specifications for good manufacturing processes; Defendants failed to certify and remediate the deficient manufacture and production of approved Dilantin products; and Defendants could have substituted a safer alternative design without having to submit another new drug application. In fact, Defendants have changed the chemical composition of Dilantin in the past without first seeking FDA approval.<sup>7</sup> For example, Defendants developed, tested and obtained approval in 1996 for another anti-epileptic drug (Cerebyx) which is chemically similar to Dilantin and does not carry the same risk of cerebellar atrophy. Further, Defendants have designed and manufactured phenytoin with an acid base used in certain forms of Dilantin products. Studies have shown that using phenytoin acid carries a lower risk of cerebellar injuries than its phenytoin sodium counterparts.<sup>8</sup> At all times material, Defendants have known of this available safer alternative design, which was economically feasible for Defendants to utilize.

122. At all times material, Dilantin was designed, tested, inspected, manufactured, assembled, developed, labeled, licensed, marketed, advertised, promoted, packaged, supplied

<sup>7</sup> See Section Labove and the Pfizer/Warner-Lambert Amended Consent Decree referenced herein.

<sup>8</sup> Dilantin Kapsseals are extended phenytoin sodium.

and/or distributed by Defendants in a defective and unreasonably dangerous condition in ways which include, but are not limited to, one or more of the following:

- a. When placed in the stream of commerce, the drug contained unreasonably dangerous design defects and was not reasonably safe and fit for its intended or reasonably foreseeable purpose or as intended to be used, thereby subjecting users and/or consumers of the drug, including Plaintiff, to risks which exceeded the benefits of the drug;
- b. The drug was insufficiently tested;
- c. The drug caused harmful side effects that outweighed any potential utility; and
- d. The drug was not accompanied by adequate labeling, instructions for use and/or earnings to fully apprise the medical, pharmaceutical and/or scientific communities, and users and/or consumers of the drug, including Plaintiff, of the potential risks and serious side effects associated with its use.

123. In light of the potential and actual risk of harm associated with the drug's use, a reasonable person who had actual knowledge of this potential and actual risk of harm would have concluded that Dilantin should not have been marketed in that condition.

124. At all times material, Dilantin was expected to reach, and did reach, users and/or consumers across the United States, including Plaintiff, without substantial change in the defective and unreasonably dangerous condition in which it was sold.

125. Plaintiff used Dilantin for its intended or reasonably foreseeable purpose. As a direct, proximate and producing result of the defective and unreasonably dangerous condition of Dilantin, Plaintiff sustained harm for which Plaintiff are entitled to damages.

126. Defendants' aforementioned conduct was committed with knowing, conscious, and deliberate disregard for the rights and safety of consumers such as Plaintiff and entitles

Plaintiff to punitive damages in an amount to be determined at trial that are appropriate to punish Defendants and deter them from similar conduct in the future.

### **THIRD CLAIM FOR RELIEF**

#### **FRAUD, FRAUDULENT CONCEALMENT AND INTENTIONAL MISREPRESENTATION**

127. Plaintiff incorporates by reference each and every paragraph of this Complaint as though set forth in full in this cause of action.

128. At all material times, Defendants were engaged in the business of manufacturing, labeling, testing, marketing, distributing, promoting and selling Dilantin.

129. Defendants made misrepresentations of material facts to and omitted and/or concealed material facts from Plaintiff and Plaintiff's prescribing physicians in the advertising, marketing, distribution and sale of Dilantin regarding its safety and use.

130. Defendants deliberately and intentionally misrepresented to and omitted and/or concealed material facts from consumers, including Plaintiff and her prescribing physicians, that Dilantin was safe when used as intended. Such misrepresentations, omissions, and concealments of facts include, but are not limited to:

- Failing to disclose, and/or intentionally concealing, the results of tests reflecting the risks of cerebellar atrophy and other neurological injuries associated with the use of Dilantin;
- Failing to include adequate warnings about the potential and actual risks of cerebellar atrophy, permanent cerebellar ataxia, speech impairments, cognitive deficits and the nature, scope, severity, and duration of these serious adverse effects;
- Concealing the known incidents of cerebellar atrophy and cognitive deficits;

- Engaging in fraudulent and misleading promotional and marketing activities, including placing advertisements in medical journals, technical booths at the ILAE and AAN conferences, CME or satellite symposiums, and scientific meetings;
- Fraudulently promoting and marketing Dilantin alongside Neurontin;
- From 1993 through the present, Defendants engaged in a systematic failure to ensure that Dilantin products were made in compliance with Current Good Manufacturing Practices (CGMP) and ensure that Dilantin was manufactured pursuant to proper and adequate specifications and formulations;
- From the 1960's through the present, Defendants partnered with nonprofit organizations, including the American Epilepsy Society and American Foundation for Epilepsy, for the improper purpose of increasing sales of Dilantin without disclosing to consumers the extent of Defendants' involvement with the nonprofit organizations or the risks associated with the drug;
- Defendants knowingly concealed the results of Dr. Manfred Hauben and Dr. Andrew Bates' safety signal analysis from Plaintiff and her prescribing physicians;
- Defendants intentionally misrepresented to, and omitted and/or concealed material facts from, at-risk populations, including Plaintiff and her respective prescribing physicians, with regard to the increased risk of cerebellar atrophy;
- Defendants have not disclosed to prescribing physicians that they never conducted adequate randomized controlled trials or safety studies to prove chronic Dilantin therapy was safe;

- Defendants chose to warn consumers and prescribing physicians in foreign countries regarding the risk of cerebellar atrophy from Dilantin, yet chose not to warn U.S. patients and healthcare providers, including Plaintiff's prescribing physicians;
- Defendants failed to disclose to Plaintiff and her prescribing physicians that Dilantin lacks efficacy and its risks outweigh the benefits of the drug;
- Defendants failed to disclose to Plaintiff and her prescribing physicians that safer alternative anti-epileptic drugs exist that do not carry a risk of cerebellar atrophy;
- Defendants failed to disclose that patients can be screened and genetically phenotyped prior to being prescribed to Dilantin in order to screen for CYP2C9\*2 or \*3 variants and avoid increased risks of cerebellar atrophy from impaired pharmacokinetics;
- That irreversible cerebellar degeneration and atrophy can begin as soon as Dilantin is taken, within days or weeks of therapy, and over short or long periods of time;
- Recommended doses can lead to toxic levels of serum concentrations that contribute to cerebellar atrophy, ataxia, loss of locomotion, and other neurological impairments;
- One time exposure to Dilantin can cause permanent and irreversible cerebellar damage;
- Case-control studies showed a greater risk, incidence and causative findings of moderate to severe cerebellar atrophy associated with long-term Dilantin therapy;

- That the use of Therapeutic Monitoring (TDP) using free phenytoin and therapeutic levels of Dilantin should be used to closely monitor patients weekly to bi-monthly along with frequent neurological examinations;
- That several scientific groups have recommended that Dilantin not be used as a 1<sup>st</sup> or 2<sup>nd</sup> line agent and recommended restricting its use in at-risk populations (pregnant women, newborns, children, mentally disabled, elderly) due to risks of cerebellar atrophy and adverse neurological sequelae and due to lack of efficacy.

131. Defendants intentionally concealed facts known to them, as alleged herein, in order to ensure increased sales of Dilantin, including concealing facts from Plaintiff and her prescribing physicians.

132. Defendants had a duty to disclose the foregoing risks and failed to do so despite possession of material information concerning those risks. Defendants' representations that Dilantin was safe for its intended purpose were false as Dilantin was, in fact, dangerous to Plaintiff's health. Moreover, Defendants knew that their statements were false, knew of numerous incidents of cerebellar atrophy, deaths, permanent cerebellar ataxia, speech impairments and cognitive deficits, and knew that their omissions rendered their statements and product label false or misleading.

133. Further, Defendants failed to exercise reasonable care in ascertaining the accuracy of the safety information regarding the use of Dilantin and failed to disclose to prescribing physicians and patients that Dilantin caused cerebellar atrophy, deaths, permanent ataxia, and cognitive deficits, among other serious neurological adverse effects. Defendants also failed to exercise reasonable care in communicating safety information concerning Dilantin to Plaintiff's

prescribing physicians and Plaintiff and/or concealed facts that were known to Defendants from Plaintiff's prescribing physicians and treating physicians.

134. Plaintiff's prescribing and treating physicians were not aware of the falsity of the foregoing representations, nor were Plaintiff's prescribing physicians or treating physicians aware that material facts concerning the safety of Dilantin had been concealed or omitted by Defendants. The misrepresentations were made on the dates of the communications, labeling and marketing records identified in the Complaint, and include Defendants' failure to disclose the essential scientific information for the safe use of Dilantin.

135. In reliance upon Defendants' misrepresentations and the absence of disclosure of the serious health risks identified above, on the dates that Plaintiff's prescriptions for Dilantin were written, Plaintiff's prescribing physicians relied on Defendants' misrepresentations and prescribed Dilantin to Plaintiff. Further, for the purpose of assessing the risks and benefits of prescribing Dilantin products to Plaintiff for Plaintiff's seizure disorder, Plaintiff's prescribing physicians relied on their respective education, training and experience; the Physician Desk Reference and product label for branded Dilantin products; Defendant-sponsored medical and pharmaceutical websites; continuing medical education conferences where Dilantin was discussed; Defendants' sponsored medical literature on Dilantin; discussions with sales representatives for Defendants at the time Defendants' sales representatives visited their offices to sell Dilantin; Dear Healthcare Professional (DHC) letters and written materials provided by Defendants regarding Dilantin, among other documents and communications.

136. Plaintiff's prescribing physicians relied on Defendants to fairly and accurately disclose the risk and safety information regarding the risks of cerebellar atrophy and related neurological sequelae. The prescribing physicians were not aware of the falsity of the

misleading safety information above (including the information identified in Paragraph 125), on which Plaintiff's prescribing physicians relied at the time they prescribed Dilantin to Plaintiff.

137. Plaintiff's prescribing physicians have the option to prescribe a large volume of anti-epileptic medications to their respective patients. It is impractical to place the burden on or expect every physician to manage a medical practice, effectively treat their patients, and review all of the available safety literature regarding every drug that may be applicable to their practice. These obvious impracticalities are, in part, why federal regulations place the burden on drug companies like Defendants to disclose all material safety information regarding the safe and effective use of their drugs. It is Plaintiff's prescribing physician's medical practice to rely on safety information provided by drug companies like Defendants, including but not limited to prescribing information disseminated in labeling, Medication Guides, DHCP letters, sales literature, symposiums and medical conferences. Plaintiff's prescribing physicians were exposed to, reviewed and relied upon the safety information referenced above when they analyzed the safest and most effective AED for Plaintiff. Had Plaintiff or her prescribing physicians known of the true risks of severe, irreversible neurotoxicity, including death, cerebellar atrophy, permanent ataxia, dysarthria, cognitive impairments and related neurological sequelae, Plaintiff would not have been prescribed Dilantin or taken the drug. Instead, Plaintiff's prescribing physicians would have prescribed a different AED with no or far less risk of these neurotoxic sequelae, including cerebellar atrophy and related neurological injuries.

138. The reliance by Plaintiff and her prescribing physicians upon Defendants' misrepresentations was justified because said misrepresentations and omissions were made by individuals and entities that were in a position to know the true facts concerning Dilantin. Plaintiff and Plaintiff's prescribing physicians were not in a position to know the true facts

because Defendants aggressively promoted the use of Dilantin and concealed the risks associated with its use, thereby inducing Plaintiff and her prescribing physicians to use and prescribe Dilantin.

139. As a direct and proximate result of Defendants' misrepresentations and/or concealment, Plaintiff suffered conscious pain and suffering, and suffered injury and harm as previously alleged herein.

140. Defendants' conduct in concealing material facts and making the foregoing misrepresentations, as alleged herein, was committed with conscious or reckless disregard of the rights and safety of consumers such as Plaintiff, thereby entitling Plaintiff to punitive damages in an amount to be determined at trial that is appropriate to punish Defendants and deter them from similar conduct in the future. Plaintiff are not alleging any cause of action of fraud on the FDA.

#### **FOURTH CLAIM FOR RELIEF**

##### **BREACH OF IMPLIED WARRANTY**

141. Plaintiff incorporates by reference each and every paragraph of this Complaint as though set forth in full in this cause of action.

142. Defendants manufactured, marketed, sold, and distributed Dilantin.

143. At the time Defendants marketed, sold and distributed Dilantin for use by Plaintiff, Defendants knew of the purpose for which Dilantin was intended and impliedly warranted Dilantin to be of merchantable quality, safe and fit for such use.

144. Plaintiff's prescribing physicians reasonably relied on the skill, superior knowledge, and judgment of Defendants as to whether Dilantin was of merchantable quality, safe and fit for its intended use.

145. Plaintiff used Dilantin which was made available to Plaintiff's prescribing physicians by the Defendants. Due to Defendants' wrongful conduct as alleged herein, Plaintiff could not have known about the risks and side effects associated with Dilantin until after Plaintiff ingested it.

146. Contrary to such implied warranty, Dilantin was not of merchantable quality and was not safe or fit for its intended use.

147. As a direct and proximate result of Defendants' breach of implied warranty, Plaintiff suffered conscious pain and suffering, injury and harm as previously alleged herein.

148. Defendants' aforementioned conduct was committed with knowing, conscious, and deliberate disregard for the rights and safety of consumers such as Plaintiff, thereby entitling Plaintiff to punitive damages in an amount to be determined at trial that is appropriate to punish Defendants and deter them from similar conduct in the future.

#### **FIFTH CLAIM FOR RELIEF**

##### **BREACH OF EXPRESS WARRANTY**

149. Plaintiff incorporates by reference each and every paragraph of this complaint as though set forth in full in this cause of action.

150. Defendants expressly warranted that Dilantin was safe and well accepted by consumers and was safe for long-term use. Specifically, Defendants represented to healthcare professionals and the public, including Plaintiff, that Dilantin was a safe and effective seizure management product and that it could be safely and appropriately used by all populations. Additionally, Defendants aggressively marketed Dilantin to the public and healthcare professionals, including Plaintiff, for use in all populations for the long-term prevention of seizures. Defendants have sponsored considerable television, print and internet advertising

initiatives that falsely over-promoted the benefits, and understated the risks, of Dilantin including directly to Plaintiff. Had Defendants included the critical safety information referenced above in their advertising and promotional campaigns, Plaintiff would not have used or been prescribed Dilantin. Moreover, Plaintiff allege that the Dilantin label itself is an express warranty regarding the safe and effective nature of the drug; that in addition to the advertisements referenced above, Plaintiff's prescribing physician relied on the label with respect to the administration of Dilantin to Plaintiff.

151. Dilantin does not conform to these express representations because it is not "safe" as represented by Defendants for the reasons stated above, including but not limited to "safe" for use by individuals such as Plaintiff.

152. Plaintiff was not aware of the falsity of the foregoing representations, nor were Plaintiff aware that material facts concerning the safety of Dilantin had been concealed or omitted. In reliance upon Defendants' warranties that Dilantin was safe for use by the public (and the absence of disclosure of the serious health risks), Plaintiff was prescribed Dilantin. Had Plaintiff known the true facts concerning the risks associated with Dilantin, Plaintiff would not have purchased or Plaintiff would not have taken it and would not have been injured. By virtue of their wrongful conduct described herein, Defendants breached their express warranties to Plaintiff. As a direct and proximate result, Plaintiff suffered the actual damages described herein.

## **SIXTH CLAIM FOR RELIEF**

### **NEGLIGENCE AND NEGLIGENT MISREPRESENTATION**

153. Plaintiff incorporates by reference each and every paragraph of this Complaint as though set forth in full in this cause of action.

154. Defendants owed a duty to prescribers and consumers of Dilantin, including Plaintiff, to use reasonable care in designing, testing, labeling, manufacturing, marketing, supplying, distributing and selling Dilantin, including a duty to ensure that Dilantin did not cause users to suffer from unreasonable, unknown, and/or dangerous side effects.

155. Defendants failed to exercise reasonable care in the warning about, designing, testing, labeling, manufacture, marketing, and/or distributing Dilantin and breached their duties to Plaintiff in that they did not warn of the known risks associated with the use of Dilantin and did not exercise an acceptable standard of care. Moreover, the product lacked sufficient warnings of the hazards and dangers to users of said product and failed to provide safeguards to prevent the injuries sustained by Plaintiff. Defendants failed to properly test Dilantin prior to its sale and, as a result, subjected users to an unreasonable risk of injury when those products were used as directed and recommended.

156. Defendants additionally breached their duty and were negligent in their actions, misrepresentations, and omissions toward Plaintiff in the following ways:

- a. Failed to exercise due care in designing, developing, and manufacturing Dilantin so as to avoid the aforementioned risks to individuals using these products;
- b. Failed to include adequate warnings with Dilantin that would alert Plaintiff, her prescribing physician and other consumers to its potential risks and serious side effects;
- c. Failed to adequately and properly test Dilantin before placing it on the market;
- d. Failed to conduct sufficient testing on Dilantin, which if properly performed, would have shown that Dilantin had serious side effects, including, but not limited to, cerebellar atrophy and cognitive deficits;

- e. Failed to adequately warn Plaintiff and her prescribing physicians that use of Dilantin carried a risk of cerebellar atrophy, cognitive deficits and other serious side effects;
- f. Failed to provide adequate post-marketing warnings or instructions after Defendants knew, or should have known, of the significant risks of cerebellar atrophy and cognitive deficits from the use of Dilantin;
- g. Placed an unsafe product into the stream of commerce; and
- h. Were otherwise careless or negligent.

157. Defendants knew, or should have known, that Dilantin caused unreasonably dangerous risks and serious side effects of which Plaintiff would not be aware. Defendants nevertheless advertised, marketed, sold and/or distributed Dilantin knowing of its unreasonable risks of injury.

158. Defendants knew or should have known that consumers such as Plaintiff would suffer injury as a result of Defendants' failure to exercise reasonable care as described above.

159. Upon information and belief, Defendants knew or should have known of the defective nature of Dilantin, as set forth herein, but continued to design, manufacture, market, and sell Dilantin so as to maximize sales and profits at the expense of the health and safety of the public, including Plaintiff, in conscious and/or negligent disregard of the foreseeable harm caused by Dilantin.

160. Defendants failed to disclose to Plaintiff and the general public facts known or available to them, as alleged herein, in order to ensure continued and increased sales of Dilantin. This failure to disclose deprived Plaintiff of the information necessary for Plaintiff and her prescribing physicians to weigh the true risks of taking Dilantin against the benefits.

161. As a direct and proximate result of Plaintiff's use of Dilantin, Plaintiff suffered serious bodily injury, including but not limited to, cerebellar atrophy cognitive deficits.

162. By virtue of Defendants' negligence, Defendants have directly, foreseeable and proximately caused Plaintiff to suffer serious bodily injury and other losses. As a result, the imposition of punitive damages against Defendants is warranted.

#### **SEVENTH CLAIM FOR RELIEF**

##### **GROSS NEGLIGENCE**

163. Plaintiff incorporates by reference each and every paragraph of this Complaint as though set forth in full in this cause of action.

164. Defendants had a duty to exercise reasonable care in the warning about, design, testing, manufacture, marketing, labeling, sale, and/or distribution of Dilantin, including a duty to

ensure that Dilantin did not cause users to suffer from unreasonable and dangerous side effects.

165. Defendants failed to exercise reasonable care in the warning about, design, testing, manufacture, marketing, labeling, sale, and/or distribution of Dilantin, in that Defendants knew or should have known that taking Dilantin caused unreasonable and life-threatening injuries.

166. Defendants are grossly negligent in the warning about, design, testing, manufacture, marketing, labeling, sale, and/or distribution of Dilantin.

167. Although Defendants knew, or recklessly disregarded, the fact that Dilantin caused potentially lethal side effects, Defendants continued to market Defendants' product Dilantin to consumers, including Plaintiff, without disclosing these side effects.

168. Defendants knew and/or consciously or recklessly disregarded the fact that consumers such as Plaintiff would suffer injury as a result of Defendants' failure to exercise reasonable care as described above.

169. Defendants knew of, or recklessly disregarded the defective nature of Dilantin, as set forth herein, but continued to design, manufacture, market, and sell Dilantin so as to maximize sales and profits at the expense of the health and safety of the public, including Plaintiff, in conscious and/or reckless disregard of the foreseeable harm caused by Dilantin.

170. As a direct and proximate result of the gross negligence, willful and wanton misconduct, or other wrongdoing and actions of Defendants described herein, which constitute a deliberate act or omission with knowledge of a high degree probability of harm and reckless indifference to the consequences, Plaintiff suffered conscious pain and suffering, and suffered injury and harm as previously alleged herein.

171. As a direct and proximate result of the gross negligence, willful and wanton misconduct, and other wrongdoing and actions of Defendants, which constitute a deliberate act or omission with knowledge of a high degree probability of harm and reckless indifference to the consequences, Plaintiff was injured.

172. Defendants' aforementioned conduct was committed with knowing, conscious, and/or deliberate disregard for the rights and safety of consumers such as Plaintiff, thereby entitling Plaintiff to punitive damages in an amount appropriate to punish Defendants and deter them from similar conduct in the future.

**EIGHTH CLAIM FOR RELIEF**

**ALTER EGO, CORPORATE LIABILITY AND CIVIL CONSPIRACY**

173. Plaintiff incorporates by reference each and every paragraph of this complaint as though set forth in full in this cause of action.

174. At all times material, each of the Defendants was the agent, servant, partner, aider and abettor, co-conspirator and/or joint venturer of each of the other Defendants herein and were at all times operating and acting within the purpose and scope of said agency, service, employment, partnership, conspiracy and/or joint venture and rendered substantial assistance and encouragement to the other Defendants, knowing that their conduct constituted a breach of duty owed to Plaintiff.

175. Defendants entered into a civil conspiracy and agreements whereby they created an atmosphere of misrepresentations and deceit which allowed Defendants to sell Dilantin without adequate warnings to prescribing physicians and patients.

176. There exists and, at all times herein mentioned, there existed a unity of interest in ownership between Defendants such that any individuality and separateness between Defendants has ceased and these Defendants are alter ego of each other and exerted control over each other. Adherence to the fiction of separate existence of Defendants as an entity distinct from other certain Defendants will permit an abuse of the corporate privilege and would sanction a fraud and would promote injustice.

177. Defendants were engaged in the business of, or were successors in interest to entities engaged in the business of researching, designing, formulating, compounding, testing, manufacturing, producing, processing, assembling, inspecting, distributing, marketing, labeling, promoting, packaging, prescribing and/or advertising for sale, and selling Dilantin for the use

and ingestion by Plaintiff and other users. As such, each Defendant is individually as well as jointly and severally liable to the Plaintiff for Plaintiff's damages.

178. At all times herein mentioned, the officers and/or directors of the Defendants participated in, authorized and/or directed the production and promotion of the aforementioned products when they knew or, with the exercise of reasonable care and diligence, should have known of the hazards and dangerous propensities of Dilantin and thereby actively participated in the tortious conduct which resulted in the injuries suffered by Plaintiff.

**VII. PRAYER FOR RELIEF**

Plaintiff respectfully requests the following relief against all Defendants:

- a. Awarding all actual, compensatory and punitive damages to Plaintiff in amount to be determined at trial;
- b. Awarding pre-judgment and post-judgment interest to Plaintiff;
- c. Awarding the costs and expenses of litigation to Plaintiff;
- d. Awarding reasonable attorneys' fees to Plaintiff; and
- e. Such further relief as this Court deems necessary, proper and just.

**DEMAND FOR JURY TRIAL**

Plaintiff demands a trial by jury on all issues so triable in this civil action.

DATED: August 18, 2020

Respectfully submitted,

*/s/ Randi Kassan*

Randi Kassan

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